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THE AMERICAN CASTE SYSTEM AND THE QUESTION OF NEGRO INTELLIGENCE*

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I. BACKGROUND OF THE PROBLEM

The apparent subordination of Negroes to whites by limitations of their economic and social privileges is found in varying degrees in the New World. The view that the relationships between these groups in the United States (not solely in the South, but particularly there) are systematically ordered and maintained by a caste-like structure, was the creation of Warner.[16,17] Within either color caste is found a system of social classes, and movement up and down the ladder of class within either caste is expected; but it is not expected that there will be any movement across caste lines in either direction. Social classes overlap somewhat in their membership and participation lines are not rigidly drawn. In this respect social classes are to be contrasted with color castes, of Negroes and whites, which are mutually exclusive in their social life. Thus, it is implied that American society limits the ceiling of the Negro's social and economic ascent and sets the bounds within which the different levels of his own society will be fixed.

If it is true, therefore, that there are limitations placed upon the American Negro's participation in cultural opportunities, obviously he is very definitely handicapped in a comparative study of intelligence test performance, especially where whites are also concerned. This unequal share in the cultural scheme will be reflected in the Negro's responses to test questions.†

* This article is based on the writer's doctoral dissertation.[2] The research was done under the direction of Dr. A. R. Gilliland of Northwestern University, and made possible by a fellowship grant from the General Education Board.

† It is significant that, almost without exception, all measurements of the Negro have been made with tests standardized chiefly on Northern, urban whites.

The problem of evaluating the comparative ability of whites and Negroes by means of intelligence tests has been one of keen interest and lively controversy.* It is so infinitely complex that any direct comparison of average test scores is meaningless,[10] pp. 163–164. Involving, as it does, questions of the nature and methods of measuring these capacities, the as yet impossible task of abstracting intelligence from such pertinent factors as emotional characteristics or traits, all the unanswered problems regarding heredity and environment in ontogeny, and the need of experimental control of environmental influences, its complexity reaches fantastic proportions. But if we cannot optimistically look forward to a direct solution of such a problem, we may at least expect to see it replaced by a variety of indirect formulations which can be attacked experimentally. One of several indirect approaches to the problem will be presented in this paper.

II. OBJECTS OF THE PRESENT STUDY AND PROCEDURE

The chief problem set for this investigation was to study the relationships between social stratification and standing in intelligence tests. It was undertaken to discover whether there are significant differences in intelligence-test scores within Negro society depending upon variations in social class. We hope by this approach to do two things:

(*A*) To throw further light upon the validity of the various hypotheses of Negro-white differences in intelligence scores through a study of the relation of the social class system† to differences within

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Such a procedure in the light of the caste concept, is unjustifiable; for tests are applicable only to individuals similar in their experiential background to the groups upon whom they were standardized. When we administer these tests to individuals from widely differing social, economic, and educational levels, we violate the basic assumption of the intelligence test method. In a recent critical survey, Garrett and Schneck[6] write that "the examiner must always remember that comparisons are permissible only when environmental differences are absent, or at least negligible" (Pt. II, p. 24).

* For a comprehensive discussion of the techniques and results of Negro-white testing see Thompson,[15] as well as several briefer reviews by Klineberg,[10] Anastasi,[1] and Garth.[5]

† As defined by Warner,[17] p. 19, "a class system is a series of social levels in a community, some of which are held to be superior and dominant over the subordinate and inferior ones below them."

the Negro group. Thus, with "race,"* educational opportunity, discrimination, and other experimental variables held as constant as practicable, we shall study differential test behavior which is associated with culture and social environment. From the results it can be ascertained whether there are marked and significant differences in test standing between various groups within Negro society depending upon variations in milieu. If such differences are discovered, then Negro-white differences may be satisfactorily explained without recourse to the hypothesis of innate "racial" differences in mental ability.† Standing in intelligence test might be thought of as a matter of individual differences rather than "racial" differences.

(*B*) To test the following hypothesis: If the subaverage test performance of the Negro is due to his position in the American social system then, other things being equal, as his socio-economic conditions approximate more and more closely those of the white, his test scores should rise correspondingly.

Investigations of the nature proposed cannot, of course, offer a conclusive analysis of the relative contributions of cultural and biological factors. Many uncontrolled conditions still remain. Perfect control of conditions, however, cannot be obtained outside of an experimental set-up. In any event, the study of "intra-racial" differences or subgroups within the Negro "race" at least brings us a step closer to an unravelling of the complex factors which produce "racial" differences.

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* "Race" here, and throughout this article, refers to a large group of persons possessing in common certain physical characteristics which are based upon heredity. Whenever the concept is used it will be enclosed in quotation marks to indicate that it cannot be applied except in the loosest sense. For readable accounts of many of the difficulties of "race" classification see Huxley and Haddon;[9] also, Herskovits.[8] Perhaps we should also stress the fact that, as concerns the American Negro, the word "race" is a sociological term. Herskovits,[7] for example, has shown that this group constitutes a population which is "probably less than one-fourth Negro descent" (pp. 10–18), and that the average American Negro is as far removed in respect to "racial" traits from the pure Negroid type as he is from the average Causoid type. Yet old patterns of "racial" prejudice tend to persist, and those suspected of possessing the slightest strains of "Negro blood" are classified sociologically as Negroes. See also Warner.[17]

† The problem of heredity *versus* environment, nature *versus* nurture, as it is being considered here, does not refer to individual, but to group differences. This research, therefore, is not concerned with hereditary and environmental factors which enter individual differences, but those "racial" and "non-racial" factors which have been proposed to explain group differences. See Klineberg,[10] p. 154 and Anastasi.[1]

The study includes four hundred ninety-seven cases, comprising the entering students at West Virginia State College for the years 1935, 1936, and 1937. The freshmen represented in these classes come from twenty-seven states and the District of Columbia. The data relative to students' background and mental ability were secured from the following sources: (1) Student's application blank; (2) Sims Score Card for Socio-Economic Status (14);* and, (3) scores on the American Council Psychological Examination (1935, 1936, and 1937 editions). All tests were administered by the writer and scored with the assistance of advance students in the department of psychology.

III. RESULTS AND DISCUSSION

The findings will be treated under two topics: (1) Relations between social stratification and intelligence-test scores; (2) relations between specific social factors and intelligence-test scores.

A. Relations between Social Stratification and Intelligence-test Scores

As an objective means of identifying the various social levels or classes within Negro society, Sims Score Card for Socio-Economic Status was employed. Table I shows the mean scores for the classes formed. The entire range of scores was from 4 to 35 with a mean of 16.05 and a standard deviation of 5.97. In the table this range has been divided into three parts (lower quartile, interquartile range, and upper quartile) indicating lower (Group I), middle (Group II), and upper (Group III) classes. The typical socio-economic conditions of members belonging to each of these classes are as follows:

(1) Lower class (Group I).
No telephone; father a laborer, truck driver, or a miner; average number of 5.7 in family living in average of 5.29 rooms. Neither father nor mother had gone to high school. They belonged to no clubs, attended no concerts nor lectures, sometimes read one magazine and owned less than twenty-five books.

(2) Middle class (Group III).
The family usually kept one or two roomers, had a telephone, furnace heat, and over twenty-five books. The mother had gone to high school, belonged to a club which was usually a church club, and subscribed for one or two magazines. The father was mechanic, Pullman porter, janitor or miner, and had gone to high school.

* The score of this test is offered by its author as an index of a youth's social background obtained through his answers to certain questions concerning his possessions at home—his father's occupation, and the books and other cultural indices of the family.

(3) Upper class (Group III).
Most frequently the father was found to be a minister, though fathers' occupations varied from miner, to doctor, dentist, lawyer, to faculty member of a university. Families of this group generally owned a car, and possessed more than 126 books. They subscribed to three or more magazines, had an average family group of 4.94 people living in an average of 7.90 rooms, attended concerts frequently, and spent their summers away from home. Both father and mother had gone to high school and one or the other to college. The youth had his own room and took private lessons in music.

Scores for socio-economic status on the Sims Score Card range from zero to a maximal of thirty-six. No one reached this maximal score which is the theoretical perfect score, but two made scores of 32 and 35, respectively. Since these scores are comparative within the group, an interpretation of the lowest and the highest is pertinent to the study. Of the three youth at the bottom of the scale (each made a score of 4) two were children of miners and one of a night watchman. There were eight persons living in three rooms. None has a telephone, furnace heat, a bathroom, or magazines. None went to a dentist except when needed, and one had never been at all. The mother went to no lectures, clubs, or concerts; the child had had no lessons in music or dancing; and in only one case had either parent been to high school.

At the other extreme end of this scale were those scoring 32 and 35—two cases. Their fathers were a doctor and mortician. One owned two cars and the other "three or more"; both father and mother had gone to college; their families average five persons occupying ten rooms; the mother belonged to two clubs and frequently attended concerts. The youth had their own rooms, had private lessons in either or both music and dancing, had dental work done at regular intervals, and had servants in the home.

Such is the picture of the bottom and the top scores. Social Groups I, II, and III are those which will be compared as the study progresses.

1. *Gross Intelligence Scores and Social Classes.*—The mean gross test score of students in each social group is shown in Table I. It is seen that Group I is lowest with a mean score of 80.60, while Groups II and III follow with mean scores of 94.03 and 98.90, respectively.

The relationship noted above is also shown by the correlation of $.18 \pm .03$ found between intelligence scores and social status for the entire group (497 cases).

One important question is whether the difference between the means of Group I and III is significant. The standard error of this difference is 4.90 and the critical ratio is 3.73. But what about the

TABLE I.—MEAN SOCIO-ECONOMIC SCORES AND MEAN PSYCHOLOGICAL SCORES FOR SOCIAL GROUPS I, II, AND III AND COMBINED GROUPS

Social groups	Scores for social status			Average psychological scores			No. of cases
	Mean	Sigma	Range	Mean	Sigma	Range	
I	9.50	1.93	4–11	80.60	35.43	7–210	128
II	15.74	2.27	12–19	94.03	41.40	14–216	225
III	23.58	3.25	20–35	98.90	45.27	15–264	144
Total.....	16.05	5.97	4–35	92.12	41.13	7–264	497

difference between the means of Groups I and II, and Groups III and II? The standard error of the difference between the former (Groups I and II) is 4.17 and the critical ratio is 3.22; the difference

TABLE II.—MEDIAN SCORES MADE ON VARIOUS PARTS OF THE PSYCHOLOGICAL EXAMINATION ACCORDING TO SOCIAL GROUPS

Social groups	Tests					Number of cases
	Completion	Arithmetic	Artificial language	Analogies	Opposites	
(1)	(2)	(3)	(4)	(5)	(6)	(7)
I	14.00	10.48	13.71	11.36	24.58	128
II	18.35	11.57	16.35	14.18	28.09	225
III	18.96	8.60	17.37	14.80	30.63	144
Total....	16.34	10.50	15.73	13.76	27.17	497

between the latter (Groups III and II) was not found to indicate a significant difference in intelligence test standing. It may tentatively be concluded, therefore, that there is a definite and positive relationship between the social classes within Negro society and intelligence as measured by the American Council Psychological Examination.

2. *Individual Test Scores and Social Classes.*—To further test our hypothesis on this matter, however, the examination was analyzed in order to ascertain the relative standing of the social classes in scores

made on each component part of the examination. Table II gives the results of this analysis.

It can be seen that in every case except one, the arithmetic test for Group III, the groups maintain the same relative ranking as when they were compared on the basis of gross scores in Table I. Incidentally, arithmetic ability may be less influenced than most other abilities by social status.

3. *Distribution of Test Scores among Social Classes.*—A question of considerable importance from a sociological as well as a psychological point of view is the extent to which the social classes possess students of the highest and lowest intelligent scores. Table III contains data which answer this question.

TABLE III.—PERCENTAGE OF STUDENTS REACHING OR EXCEEDING GROUP MEAN, THOSE MAKING A SCORE OF 100 OR MORE, AND THOSE MAKING LESS THAN 50 BY SOCIAL GROUP

Social groups	Number of cases	Percentage reaching or exceeding group mean	Percentage making score of 100 or more	Percentage making less than 50
(1)	(2)	(3)	(4)	(5)
I	128	35.40	25.78	21.87
II	225	51.87	41.77	15.55
III	144	52.46	40.28	10.42
Total.....	497	44.37	37.62	15.70

It is interesting to note that when the social classes are compared on the basis of the presence of students with high test scores and the absence of those with low ones, they maintain the same relative ranking as when they were compared on the basis of gross and individual test scores.

B. Relations between Specific Social Factors and Intelligence-test Scores

It remains now to inquire into the relationships existing between intelligence scores and certain specific social factors operating in the life of students.

1. *Parental Occupations and Intelligence Scores.*—The occupations of the fathers were secured from Sims Score Care. The method of classifying occupations suggested by Sims[14] was used except in his classification of postal workers, high-school teachers, and morticians,

all of whom were placed in the professional groups.* Table IV shows the number of students in each occupational group and the central tendency with respect to intelligence and socio-economic status. The occupational distribution of the four hundred ninety-seven fathers shows general agreement with that of the Negro workers of the state.[11]

TABLE IV.—SOCIO-ECONOMIC AND INTELLIGENCE-TEST SCORES ACCORDING TO OCCUPATIONS OF FATHERS

Occupational groups	Number of cases	Percentage of total	Median socio-economic score	Median intelligence test score	Intelligence inter-quartile range
Professional	81	16.30	22.81	95.93	69.43–142.25
Commercial	21	4.23	22.06	93.13	66.88–121.31
Artisan	68	13.68	17.50	91.46	60.71–115.63
Skilled labor	254	51.10	14.05	83.00	58.60–113.08
Unskilled labor	73	14.69	13.25	79.25	56.24–107.65
Total	497	100.00	14.99	81.11	59.60–117.59

A feature in Table IV of special interest is the trend of values as we run down from the professional group to the unskilled labor group. It is seen that the professional group leads when considered on the basis of both ratings for socio-economic status and intelligence with median scores of 22.81 and 95.93, respectively. The commercial group is next with median scores of 22.06 and 93.13, respectively, on the socio-economic and intelligence tests. The trend in all instances is obviously from high to low as we go down the columns. The intelligence-test standing of students as well as their socio-economic status tend to correspond to parental occupations.

2. *Intelligence-test Scores and Educational Attainments of Parents.*—One way of determining if the educational level of parents actually

* The reason for this is that the hierarchy of occupations is not the same for Negroes and whites in the United States and, consequently, a given occupation often represents a different socio-economic level in the two groups. Sims classification of postal workers, high-school teachers, and morticians are cases in point. He places these workers in Groups II, III, and IV, respectively. The Negro postal workers, high-school teachers, and morticians certainly enjoy higher relative ranks than these within the Negro group; the writer, therefore, feels justified in placing these workers in the professional group. See in this connection, Price,[12] pp. 431–432, Canady,[2] pp. 16–17, 60–62, and Caliver,[3] p. 66.

increases as the intelligence scores of their children increase is by ascertaining the educational attainment of parents of children whose intelligence scores fall in various quartiles. Table V furnishes information on this matter as it relates to the group under consideration. It can be seen that there is a definite relationship between the amount of schooling possessed by parents and the test standing of their children.

TABLE V.—PERCENTAGE OF STUDENTS WHOSE PARENTS ATTENDED HIGH SCHOOL OR COLLEGE, GROUPED ACCORDING TO QUARTILE IN WHICH THEIR INTELLIGENCE-TEST SCORES FALL

Quartile	No.	Attended high school		Combined, per cent	Attended college		Combined, per cent
		F, per cent	M, per cent		F, per cent	M, per cent	
Upper quartile	122	63.9	81.4	72.5	23.0	34.43	28.7
Interquartile range	246	53.3	64.2	58.7	20.3	29.27	24.8
Lower quartile	129	45.7	46.5	46.1	10.1	17.05	13.6

3. *Intelligence-test Scores and Type of Communities.*—Although the Negro is subordinated to whites in America, caste-like restrictions are less rigid and "racial" antipathies less violent as one proceeds from

TABLE VI.—MEAN INTELLIGENCE-TEST SCORES, GROUPED ACCORDING TO COMMUNITIES FROM WHICH STUDENTS COME

Sources of students	No. of cases	Means of test score	Sigmas
Large cities in the North	62	113.15	38.79
Large cities in the South	68	110.87	49.76
Small cities and towns in the North	41	92.62	43.50
Border states	282	85.55	41.13
Small cities and towns in the South	52	79.00	39.57
Large cities in West Virginia	125	93.74	43.20
Small cities in West Virginia	149	77.36	36.32

the old South to the border states and on to the North,[17] p. 12. Moreover, social and economic subordination are often less severe in the larger cities (population in excess of one hundred fifty thousand) of the old South than in some of the rural sections of the North. In view of these conditions, it will be interesting to ascertain the results

of this study in the relation to type of communities from which students come, to scores on the intelligence test.

Table VI furnishes data which throw some light on this problem. The outstanding fact revealed by these data is the increase in mean scores made by students observed in proceeding from the southern rural areas to the northern communities. It appears, therefore, that differences in formalized relations between Negroes and whites in various sections of America are reflected in the Negroes performance on intelligence tests.

IV. SUMMARY AND CONCLUSIONS

The immediate objective of this study was to discover whether there were significant differences in intelligence scores within Negro society depending upon variation in several factors or conditions that appear to have relevance to mental development. Its second purpose is to throw further light on the various theories of Negro-white differences in ratings for intelligence. For example, if intelligence scores within the Negro group vary according to social environment, then Negro-white differences in test performance may be satisfactorily explained without recourse to the hypothesis of genetic differences in mental ability. The writer wishes to emphasize again his view that the problem of nature *versus* nurture, as it is being considered here, does not refer to individual, but to group differences.

The study included four hundred ninety-seven cases, comprising the entering students at West Virginia State College for the years 1935, 1936, and 1937. The data consisted of facts concerning students' social environment and their intelligence-test scores.

Some of the more important conclusions resulting from the study are given below:

(1) Our findings together with other data[3,18] furnish definite evidence that Negroes differ among themselves as individuals considerably more than they differ from whites as a group.

(2) Negro youth of the higher social levels achieve, on the average, higher intelligence scores than do those of lower social levels when these levels are determined by the Sims scale, or expressed as occupations of fathers, education attainments of parents, and communities in which youth live.

(3) The evidence presented in the present study, and other relevant data,[1,10] lead to the conclusion that reported Negro-white differences in intelligence test performance are due in all probability to the Negro's position in the American social system.

(4) Since disparities in social environment now are reflected in disparities in test standing, the task of American society, if it is to give effect to its democratic profession, is to work to correct the social inequalities which cause the present intellectual inequalities.*

V. SUGGESTIONS FOR FURTHER RESEARCH

The present study has important implications in the field of "race" differences. Among the promising lines of further investigation which has been opened by it the following would seem to be immediately feasible:†

(1) An investigation into the validity of test norms with special reference to Negro and white groups. One test favoring the Negro group standardized on Negro subjects. An equivalent test favoring the white group standardized on white subjects. Administer both tests to each group and determine their relative performance.

(2) Longitudinal studies in which the intellectual development of the same Negro children is followed over a period of years, or by Laswell's method of interlapping age ranges for shorter periods of time.

(3) Studies of the growth and development of Negro children in foster homes.

(4) Comparative studies of the intelligence-test scores of Negroes living under varied environmental conditions.

(5) Longitudinal studies of the effects of nursery-school training on successive intelligence-test ratings.

(6) Studies of Negro-white mixture and standing in intelligence tests using improved anthropometrical measures to determine "racial" composition.

(7) Studies of recreational interests and activities of Negro youth in different IQ groups.

(8) Studies of the attitude of the Negro toward the Negro—color and class attitudes.

(9) Psychogenic hazards of segregation—studies of the mental health of Negroes.

(10) Experiments in frustration and regression in Negro children.

(11) Comparative studies of the intelligence-test performance of urban and rural Negroes.

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* Our point of view here is that since social, economic, and educational opportunities are unequal in America, the low average score made by Negroes on intelligence tests is to be regarded as a disease of our society rather than evidence of group incompetence. This concept of "society as the patient," or the "sick society" has recently been analyzed by Frank.[4]

† See also Witty,[18] pp. 267–268.

(12) Genetic studies of gifted Negro children.

(13) Studies of the socio-psychological problems of the American Negro youth.

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READING THE COMICS IN GRADES VII AND VIII

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In several other manuscripts, data were presented showing the extent to which a large number of boys and girls in grades IV, V, and VI read the comics.[1] The average number of magazines read was about fifteen in each of the grades; four of these were read regularly; and four and one half often. Comic strips also were generally read; twenty-six was the average number reported. Of these, about fifteen were read regularly; and five, often. In these grades, exactly half of the pupils reported that they enjoyed making their own comics. It appears that interest in the comics is well-defined in the fourth grade, and is maintained with about the same intensity in the fifth and sixth grades.

The similarity in children's response to the comics in the different grades was the outstanding feature of this investigation. It was particularly noticeable in the children's preferences for comic magazines. Thus, *Batman* attained first rank in all grades, and *Superman* was second. Third and fourth ranks were assigned in various grades to *Famous Funnies*, *Magic*, *Ace*, *Action*, *Flash*, and *Jungle*. Although the magazines *Jungle*, *Magic*, and *Famous Funnies* occupied somewhat different positions in the three grades, one must conclude that the most popular magazines have a rather general and similar appeal in every grade. This trend was noticeable in several other phases of the study. The average number of comic strips which the children read was about twenty-six. This was the average in the fourth grade, and it was maintained through the sixth grade. Moreover, in grades IV, V, and VI, first, second and third ranks were given to the same strips: *Dick Tracy*, *Smiling Jack*, and *Blondie*. And in grades V and VI, *Donald Duck* was assigned fourth place. Other generally popular strips included *Captain and the Kids*, *Brenda Starr*, *Nancy*, *Mickey Mouse*, and *Terry and the Pirates*.

In some of the tabulations, boys have been found to read the comics more frequently than the girls. But in all these tabulations, the differences between the sexes were neither consistent nor highly significant. The only justifiable conclusion seems to be that boys and girls are

[1] Witty, Paul: "Children's Interest in the Comics," "Reading the Comics in Grades IV, V, and VI." *Journal of Experimental Education*, December, 1941, and "Reading the Comics—A Comparative Study," *Journal of Experimental Education*, December, 1941.

generally attracted to the comics. The attraction occurs in the early grades and continues with great consistency throughout the middle grades.

The data for the preceding study were secured from twenty-five hundred children through an interview guided by a questionnaire

TABLE I.—NUMBER OF PUPILS IN RANDOM SAMPLING

Grade	Number of schools[1]	Number of pupils		
		Girls	Boys	Both sexes
VII	3	56	50	106
VIII	4	60	58	118
Both grades		116	108	224

[1] Names of schools: Field, Hammond, Scammon, Schley, Villa Park, of the Chicago area.

containing check-lists of widely read comic books, magazines, and strips. The investigation was conducted during the months of April and May, 1941. At that time, data were secured for approximately nine hundred pupils in grades VII and VIII. One-fourth of these reports

TABLE II.—MEAN NUMBER OF COMIC MAGAZINES READ
(Random Sampling)

Grade	Mean number read		
	Girls	Boys	Both sexes
VII	13.55	15.48	14.46
VIII	11.43	15.22	13.29
Both grades	12.45	15.34	13.84

were selected at random, in each grade, and constitute the basis for this study.

In this paper, we shall present data for two hundred twenty-four seventh- and eighth-grade pupils and shall compare the results with those secured for children in grades IV, V, and VI. The numbers of boys and girls in the seventh and eighth grades are given in Table I.

Table II shows the number of comic magazines read by boys and by girls. It will be noted that the average is slightly lower than that reported in the preceding investigation for younger children. Table III also corroborates this finding; it reveals a somewhat smaller amount of interest in comic magazines. Thus an average of two magazines were read regularly; three and one-half, often; and eight

TABLE III.—MEAN FREQUENCY OF READING OF COMIC MAGAZINES
(Random Sampling)

Grade	No. read regularly			No. read often			No. read sometimes		
	Girls	Boys	Both	Girls	Boys	Both	Girls	Boys	Both
VII	2.50	2.86	2.66	4.05	4.24	4.14	7.00	8.38	7.65
VIII	.98	2.22	1.59	2.13	3.62	2.86	8.31	9.37	8.83
Both grades	1.71	2.51	2.10	3.06	3.90	3.46	7.68	8.91	8.27

TABLE IV.—RANKING GIVEN BY GIRLS AND BOYS TO THE SIXTEEN COMIC MAGAZINES GIVEN HIGEST RANKING BY BOTH SEXES
(Random Sampling)

Name of magazine	Rank		
	Both sexes	Girls	Boys
Batman	1.0	2.0	1.0
Superman	2.0	1.0	2.0
Action	3.0	4.0	3.5
Detective	4.0	5.5	3.5
Famous Funnies	5.0	3.0	9.0
Ace	6.0	9.0	7.0
Wings[1]	7.0	15.0	5.0
Jungle	8.0	7.5	10.0
Flash	9.5	12.5	7.0
True	9.5	12.5	7.0
Adventure	11.0	7.5	12.5
Mystery	12.0	5.5	15.5
Weird	13.0	11.0	12.5
Magic	14.0	10.0	15.5
Shadow	15.0	14.0	14.0
War	16.0	....	11.0

[1] Not listed in questionnaire. Added by children in spaces provided for others.

sometimes. Moreover, the number of magazines read in grade VIII was slightly lower than the average for grade VII. Nevertheless, from these data, it is clear that reading the comics persists as a favorite leisure pursuit throughout the elementary school.

Table IV discloses the names of the comic magazines read most frequently by the boys and girls in grades VII and VIII.

It will be noted that certain discrepancies appear in the choices of the boys and the girls; and that differences between the sexes are more noticeable than in the preceding grades. However, the lists of preferred magazines show rather marked agreement, with certain titles distinctly popular with both boys and girls.

TABLE V.—FAVORITE COMIC MAGAZINES BY GRADES
(Random Sampling)

Grade VII		Grade VIII	
Name	Rank	Name	Rank
Batman	1.0	Batman	1.0
Superman	2.0	Superman	2.0
Action	3.0	Famous Funnies	3.0
Detective	4.0	Action	4.5
Famous Funnies	5.5	Detective	4.5
Jungle	5.5	Ace	6.5
Ace	7.5	Flash	6.5
Wings[1]	7.5	Mystery	9.0
True	9.0	Wings[1]	9.0
Flash	10.0	Adventure	9.0
Magic	12.0	True	11.0
Weird	12.0	Jungle	12.0
Adventure	12.0	Weird	13.0
Mystery	14.0	Magic	14.5
Green Mask	15.5	Planet	14.5
Shadow	15.5		

[1] Not listed in questionnaire. Added by children in spaces provided for others.

In Table V, the favorite magazines are presented for grade VII and for grade VIII. Here again, a considerable degree of constancy is found with certain favorites appearing in both grades. It is of interest to compare these data with the findings for children in grades IV, V, and VI. Table V*A* presents data for the middle grades. Comparison reveals that several of the magazines which attain high favor in grade IV continue to be generally popular throughout the grades.

TABLE VA.—FAVORITE COMIC MAGAZINES BY GRADES
(Random Sampling)

Grade IV		Grade V		Grade VI	
Name	Rank	Name	Rank	Name	Rank
Batman	1.0	Batman	1.0	Batman	1.0
Superman	2.0	Superman	2.0	Superman	2.0
Famous Funnies	3.5	Jungle	3.5	Flash	3.0
Magic	3.5	Ace	3.5	Action	4.5
Jungle	5.0	Action	5.5	Famous Funnies	4.5
Flash	6.5	Detective	5.5	Jungle	6.5
Shadow	6.5	Crack	7.5	Ace	6.5
Green Mask	10.5	Adventure	7.5	Detective	10.5
Planet	10.5	Flash	10.5	Mystery	10.5
Ace	10.5	Famous Funnies	10.5	True	10.5
True	10.5	Fantastic	10.5	Magic	10.5
Wings	10.5			Tip Top	10.5
Blue Beetle	10.5				

Table VI shows the average number of comic strips read in grades VII and VIII. There is no decrease apparently in the amount of reading of the comic strips; in fact, the average number read in each grade is almost identical with that obtained for children in the middle grades. Table VII shows that the average number of comic strips read regularly was fifteen; often, five; and sometimes, seven. These averages, too, are remarkably similar to those secured for the middle grades. Conspicuous also is the similarity of boys and girls in the frequency with which comic strips were read.

TABLE VI.—MEAN NUMBER OF COMIC STRIPS READ
(Random Sampling)

Grade	Mean number read		
	Girls	Boys	Both
VII	26.76	26.18	26.49
VIII	26.46	26.84	26.65
Both grades	26.61	26.53	26.57

Somewhat marked sex differences were secured in the study of the favorite comic strips. Thus, the girls gave *Blondie* first ranking, and

Brenda Starr attained second place. Boys, on the other hand, gave first place to *Smiling Jack*, second to *Dick Tracy*, and third to *Blondie*.

There appears to be marked similarity in the favorite comic strips in grades VII and VIII (see Table IX). Although the rank orders were

TABLE VII.—MEAN FREQUENCY OF READING OF COMIC STRIPS
(Random Sampling)

Grade	No. read regularly			No. read often			No. read sometimes		
	Girls	Boys	Both	Girls	Boys	Both	Girls	Boys	Both
VII	15.94	15.28	15.63	4.62	4.62	4.62	6.19	6.28	6.23
VIII	13.65	14.98	14.30	4.96	5.15	5.05	7.85	6.70	7.28
Both grades	14.75	15.12	14.93	4.80	4.90	4.85	7.05	6.50	6.79

TABLE VIII.—RANKING GIVEN BY GIRLS AND BOYS TO THE FIFTEEN COMIC STRIPS GIVEN HIGHEST RANKING BY BOTH SEXES
(Random Sampling)

Name of comic strip	Both sexes	Girls	Boys
Smiling Jack	1.0	2.5	1.0
Dick Tracy	2.0	2.5	2.0
Blondie	3.0	1.0	4.0
Captain and the Kids	4.0	11.0	3.0
Terry and the Pirates	5.0	5.0	5.0
Donald Duck	6.0	10.0	6.0
Flash Gordon	7.0	8.0	8.0
Brenda Starr[1]	8.5	4.0	14.5
Superman	8.5	9.0	10.0
Scarlet O'Neil[1]	10.0	7.0	12.0
Dixie Dugan	11.0	6.0	14.5
Henry	12.5	13.0	10.0
Mickey Mouse	12.5	14.5	7.0
Li'l Abner	14.0	14.5	10.0
Gasoline Alley	15.0	12.0	13.0

[1] Not listed in questionnaire. Added by children in space provided for others not listed.

altered somewhat in the two lists, the favorite strips appeared near the top of both lists. Moreover, many of these same strips attained a high degree of popularity in grade IV. Comparison of relative popularity is possible by reference to Table IX*A*.

TABLE IX.—FAVORITE COMIC STRIPS BY GRADES
(Random Sampling)

Grade VII		Grace VIII	
Name	Rank	Name	Rank
Blondie	1.0	Dick Tracy	1.0
Smiling Jack	2.0	Smiling Jack	2.0
Dick Tracy	3.0	Blondie	3.0
Captain and the Kids	4.0	Terry and the Pirates	4.0
Donald Duck	5.0	Captain and the Kids	5.0
Terry and the Pirates	6.0	Flash Gordon	6.0
Superman	7.0	Brenda Starr[1]	8.0
Brenda Starr[1]	8.5	Dixie Dugan	8.0
Flash Gordon	8.5	Scarlet O'Neil[1]	8.0
Henry	11.0	Superman	10.0
Mickey Mouse	11.0	Smitty	11.5
Scarlet O'Neil[1]	11.0	Li'l Abner	11.5
Dixie Dugan	13.0	Donald Duck	13.0

[1] Not listed in questionnaire. Added by children in spaces provided for others.

TABLE IX*A*.—RANKING GIVEN BY GRADES IV, V, AND VI TO THE COMIC STRIPS GIVEN HIGHEST RANKING BY ALL GRADES
(Random Sampling)

Name of comic strip	Rank			
	All grades	Grade IV	Grade V	Grade VI
Blondie	1.0	1.0	2.5	1.0
Dick Tracy	2.0	13.0	1.0	2.0
Smiling Jack	3.0	2.0	2.5	5.0
Lone Ranger	4.0	5.0	8.0	3.0
Donald Duck	5.0	3.0	13.5	5.0
Mickey Mouse	6.0	13.0	5.0	5.0
Brenda Starr	7.0	7.5	13.5	13.0
Henry	11.0	5.0	13.5	[3]
Toots and Casper	11.0	[2]	13.5	8.5
Dixie Dugan	11.0	13.0	13.5	13.0
Captain and the Kids	11.0	[2]	8.0	13.0
Winnie Winkle	11.0	[2]	4.0	[3]
Terry and the Pirates	11.0	[3]	8.0	8.5
Scarlet O'Neil[1]	11.0	13.0	8.0	[2]

[1] Not listed on questionnaire. Added by children in space provided for others.
[2] Listed as a favorite by only one person.
[3] Not listed as a favorite by any child.

Boys and girls continue to make their own comics in grades VII and VIII. However, there is a noticeable decline in this tendency in the eighth grade. Over sixty per cent of sixth-grade youngsters reported that they enjoyed this activity, as compared with twenty-five per cent in the eighth grade.

TABLE X.—NUMBER AND PERCENTAGE OF CHILDREN WHO LIKE TO MAKE ORIGINAL COMICS
(Random sampling)

Grade	Girls		Boys		Both sexes	
	Number	Per-centage	Number	Per-centage	Number	Per-centage
VII	35	62.5	30	60	65	61.3
VIII	12	20	17	29.3	29	24.5
Both grades	47	40.5	47	43.5	94	41.9
Mean	23.5	41.25	23.5	44.65	47	42.9

SUMMARY

Reading the comics occupies an important place in the list of children's favorite leisure pursuits. A random sampling procedure indicated that, among children in grades VII and VIII the interest in comics was rather consistent from grade to grade. The average number of magazines read was about thirteen or fourteen in these grades; two of these were read regularly; and three and one-half, often. Comic strips also were generally read; twenty-six was the average number reported to have been read. Of these, about fifteen were read regularly; and five, often. Sex differences and grade differences were not pronounced, although they were more noticeable at this level than in the middle grades. There was a slight decrease during the seventh and eighth grades in the number of comic magazines read, but the average number of comic strips was remarkably consistent.

This interest appears in several forms. In one of these—making their own comics—the boys showed a more marked inclination than the girls. About half the children make their own comics. This tendency was found in both grades although a sharp decrease occurred in the eighth grade.

This investigation adds corroborative data showing that at the present time reading the comics represents a general interest which in

grades IV to VIII is relatively uninfluenced by differences in age or grade, sex, or locality.

Attempts to give intelligent direction to children's interest in the comics are necessary since excessive reading in this area may lead to a decline in artistic appreciation, and a taste for shoddy, distorted presentations.[1] This eventuality would be unfortunate in view of the reading habits and tastes of boys and girls today. Survey after survey has disclosed that boys and girls in the middle grades typically develop reading tastes which are far from commendable. The amount of voluntary reading has been found to decrease during this period—in some studies at age twelve; in others, at age thirteen. Finally, the low estate which reading occupies in the life design of the typical adult suggests the inadequacy of the school and the home in cultivating a taste for wide reading from sources having literary merit.

We have found that the problem in excessive reading of the comics involves the entire pattern of reading; it is to be met not merely by exacting conformity or by setting up restrictions and taboos in a single field. Moreover, reading the comics is simply an activity which parallels the child's interest in the highly exciting, adventurous offerings of the radio and the motion picture. In meeting the combined problem, it is essential first that the teacher make as complete an appraisal as possible of each child's interests and his many-sided nature, since it is only from an examination of the child's total pattern that an adequate understanding of his needs may be achieved. In some children, an allotment of time to the comics which seems excessive may be viewed otherwise in terms of a well-chosen and judicious balance of worthy interests and pursuits. In other children, a relatively small amount of interest in the comics may seem unwarranted in terms of a generally impoverished pattern. Techniques such as the interest-inventory, the anecdotal record, or the child's own diary offer the teacher avenues through which the child's total behavior may be studied.

After ascertaining the needs of children, the teacher should attempt to surround them with a variety of good literary sources which are rich in the elements of action, surprise, adventure and excitement. There are many books for boys and girls which can be used advantageously

[1] Various attempts have been made by publishers to meet this problem. Cf. the comic strips in *My Weekly Reader*, and the "improved" comic magazine, *True Comics*, *Calling All Girls*, etc. The latter has attained popularity since this study was made.

in this endeavor.[1] Many of these books are reasonable in price, and all of them will be found in well-equipped school or community libraries. The problem is not one to be solved by the school alone. The parent who coöperates will strive to see that the home offers further opportunity for reading that is varied but individually appropriate. Together, the school and the home can meet the challenge presented by this favorite leisure activity. In fact, the intensity and universality of this interest provide a unique opportunity for them to offer discriminating guidance. Through their coöperative efforts, boys and girls may be introduced to a variety of satisfying reading experiences from good books containing factual, imaginative, and exciting materials. This may prove to be the first important step on the road to better reading and improved tastes.

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[1] A list of substitute books is found in: Witty, Paul, and Foster, Marie, "Books Versus Comics." *Bulletin of The Association for Arts in Childhood*, 70 Fifth Avenue, New York.

ATTITUDES: THEIR SIGNIFICANCE IN EDUCATION FOR THE GIFTED

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For some twenty years educators have been turning a part of their attention to special education for the gifted. The education of children who deviate upward from the so-called normal population has passed through several stages; first, a period of mental testing and recognition of the fact that the current curricula did not fully meet the needs of such children; second, experimentation with different curricula, methods and techniques in education attempting to meet the needs; and, third, the evaluation of the results obtained from the previous period. The fourth period is now at hand—a time for using the foundation already laid as a basis for branching out into other fields.

GROWING RECOGNITION OF THE IMPORTANCE OF ATTITUDES

For all children, to a greater extent than ever before, attempt is being made to measure and evaluate objectively and statistically, factors such as mental status, physical development, hereditary background, and environmental influence, and to determine their effect upon educational achievement.

The principal function of the school is to foster mental activity. Since it must use as a foundation the innate mental ability of its individual members, mental testing seemed for a time to offer the solution to many problems. "Measure ability, apply the correct technique, and results are assured," was the assumption. Particularly in the case of superior children the solution appeared to be a happy one. Achievement tests administered from time to time in classes for such children showed average academic results better than the test authors' norms. Since individuals are judged by averages in almost every line, whether it is the average of behavior, of intelligence, or of achievement, results seemed satisfactory.

However, along with the growing tendency to consider mental capacity as but one factor among a multiplicity of traits possessed by any child, other pertinent factors appear worthy of careful scrutiny. One phase of environmental influence has not until recently been subjected to much analytical thought. Since training for leadership is

one of the avowed objectives of present-day education, the significance of attitudes, particularly for the gifted, is becoming a thought-provoking subject.

Children come to school with attitudes, general and specific, toward the home, the church, the school, current affairs, and toward a multitude of other things. While hereditary and physical factors account for some part of the depth and intensity of attitudes, environment probably plays the major rôle in their selection. About some of them the school may be able to do little, but at least it can be alert to detect their presence and to recognize the possibility of their bearing upon achievement. For some attitudes the school is directly responsible and so must endeavor to foster those most useful and desirable. This appears to be a difficult task.

REFERENCES TO ATTITUDES IN LITERATURE ON THE GIFTED

In the earlier reports upon classes for the gifted, stress was placed primarily upon the utilization of mental ability in academic achievement. Such classes were expected to relieve the classroom teachers of the somewhat difficult problems of enrichment.[1] Goddard,[2] in his study of the early days of experimentation with classes for the gifted in Cleveland, recognized the presence of certain undesirable attitudes toward special classes but denied the presence of undesirable attitudes within the classes themselves. The accusation was made that such classes foster conceit. He failed to find evidence of such an attitude among children who had attended such classes for periods of from one to four years. It may be that the experimenters were too engrossed in the tangible achievements to be very analytical concerning the intangibles.

However, he did believe that parents might foster wrong attitudes. He states that in that case, although it seems unfair to deprive the children of opportunities, placement in regular classes would possibly be better.[3] No doubt this was not meant to imply that no effort should be made toward correcting the attitudes, but little stress is placed upon the responsibility of the school in such matters.

In Part I of the *Twenty-Third Yearbook* of the National Society for the Study of Education nearly every contributor mentions attitudes, emphasizes their importance, and cautions the school to foster their

[1] Mort, Paul R.: *The Individual Pupil*, p. 312.

[2] Goddard, Henry Herbert: *School Training of Gifted Children*, pp. 26–27.

[3] Goddard, Henry: *op. cit.*, p. 74.

proper growth. However, again the emphasis is often placed upon attitude toward school achievement.

When undesirable attitudes toward school were found in children, they were usually attributed directly to conscious fostering by parents, with the schools assuming that they themselves played almost no part. Some ideas expressed are here presented.

An argument for segregation of the gifted is to be found in the development of proper attitudes of industry and hard work, coöperativeness, responsibility, and initiative. These are worth while regardless of how much time is gained in time or subject-matter.[1]

Most children in special classes do not object to such plans (segregation) unless they are reflecting the adverse attitudes of parents.[2] Emphasis should be placed upon performance if support of special classes by the public is to be secured and maintained. Emphasis so placed aids not only scholarly development, but also development of right attitudes toward work. Children classified on a basis of performance and achievement are less likely to be snobbish. Teachers should, therefore, seek to remove all obstacles to achievement.[3]

Teachers and parents should unite in the endeavor to stamp out egotism when it appears in classes for the gifted.[4]

The published results of the White House Conference[5] again seem to afford general statements concerning attitudes. Children in classes for the gifted are reported to present no discipline problems, or at least to become quickly adjusted and to become highly satisfactory group members. There is supposedly no conceit, no jealousy, no thought of segregation being undemocratic.

However, during the decade from 1930 to 1940, the constant bombardment of opinions through improved radio communication, the universal use of propaganda, the increase in amount of leisure time, began to exert tremendous influence upon attitudes.

> We are living in the most talked-to-age that ever lived, and there has never been a time in the world's history when speech education, and all it connotes was more needed.

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[1] National Society for the Study of Education, *Twenty-Third Yearbook, Part I, The Education of Gifted Children*, p. 19.

[2] Smith, Leon O.: *Twenty Third Yearbook*, N.S.S.E., p. 70.

[3] Horn, Ernest: *Twenty-Third Yearbook*, N.S.S.E., pp. 76–78.

[4] Davis, Helen: *Twenty-Third Yearbook*, N.S.S.E., p. 128.

[5] White House Conference, *Special Education, Handicapped and the Gifted*, pp. 538–549.

He (the child) should know how much, through misuse of voice and speech, there is to live down even on the part of good thinkers.[1]

ATTEMPTS TO MEASURE ATTITUDES

The application of statistical methods to measurement of the attitudes of people toward the church carried on by Thurstone and Chave[2] is an attempt at more concrete analysis. The difficulties which they encountered in the construction of a valid scale, and the admitted discrepancies between opinion as stated and actual performance point clearly to one reason for the sporadic attempts at such measurement. It is small wonder that little was done toward the minute and painstaking dissection of the mosaic pattern comprising attitude, in classes for the gifted. It was sufficient to acknowledge its presence in the midst of more tangible difficulties.

Attempts were made to measure the influence of moving pictures upon attitudes and conduct. Some investigators concluded that, on the whole, data tend to favor the non-movie group.[3] Others found that motion pictures have lasting effects upon social attitudes of children.[4]

In the late 1930's literature appeared upon the relationship between attitudes and delinquency,[5] attitudes and citizenship training,[6] and upon phases of personality in its relationship to attitudes. Results seem to indicate that the possession of a high degree of intelligence does not guarantee immunity to unhealthy and disturbing attitudes.

Two of the most recent publications given over in whole or in part to problems peculiar to the gifted, devote a relatively large amount of space to the problem.

School studies should not be allowed to absorb the child's entire attention or even the major part of it. The physical, the social, and the moral aspects of the lives of these children are of the greatest importance.[7]

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[1] Barber, Sarah M.: in *Educating Superior Students*, edited by Helen Louise Cohen and Nancy G. Coryell, Chapter on *Speech*, p. 282.

[2] Thurstone, L. L., and Chave, E. J.: *The Measurement of Attitude.*

[3] Shuttleworth, Frank K., and May, Mark A.: *The Social Conduct and Attitudes of Movie Fans.*

[4] Peterson, Ruth C., and Thurstone, L. L.: *Motion Pictures and the Social Attitudes of Childern*, p. 66.

[5] Healy, William, and Bronner, Augusta: *New Light on Delinquency and Its Treatment.*

[6] Jones, Vernon: *Character and Citizenship Training in the Public Schools.*

[7] Heck, Arch O.: *The Education of Exceptional Children*, Ch. XXVI, *The Education of Gifted Children*, p. 391.

It is now being recognized that superior minds have adjustments to make of which those of lesser ability are unaware.

> The brighter the individual the more problems he has. As a child and as an adult he is aware of complexities which never impinge upon the consciousness of the person of average intelligence.[1]

Since emphasis is apparently shifting from utilization of superior mental ability in the narrow academic sense to the broader interpretation of its most advantageous use to society, more investigation as to what society thinks, expects, and desires is necessary. Obviously the next step is to reconcile upon some common ground the aims of education and those of society in general. Inasmuch as children acquire their attitudes for the most part from environment, the welfare of the child should constitute that common ground.

ATTITUDES OF PARENTS TOWARD THE GIFTED

The attitudes of parents toward gifted children constitute one of the most important factors in their education. Goddard[2] recognized this, and addresses one whole chapter of his book to parents. Today's wider prevalence of classes for the gifted and increasing amount of literature upon the subject written in popular style for the public, have increased the problem.

Many parents feel only quiet pride in their bright children and humility for their good fortune. Their children seldom present difficulties. However, very often bright children who become problems to their parents or to the school have acquired attitudes which can be traced to the home. Records kept over a period of eight years disclose some interesting cases.

A boy of nine years, IQ 121, began to develop a negative attitude toward all authority for no apparent reason. Quite by accident it was learned that the father took great delight in opposing the child in arguments about current affairs, especially the presidential election and the Hitler regime. The father was proud of the child's knowledge and had no idea that these arguments were contributing to the school problem.

Another mother brought her six-year-old, IQ 130, to school with many apologies. He was very independent, had already learned to read, and his main interest was in anything which had to do with

[1] Carroll, Herbert A.: *Genius in the Making*, p. 86.

[2] Goddard: *op. cit.*, Chapter XIV.

numbers. The mother repeatedly stated that the child had a bad disposition, was exceedingly jealous of a younger sister, and that she was ashamed to say he was her son. She seemed chagrined that he did not follow the usual pattern and seemed quite aloof from her. Affection was lavished on the more ordinary child, possibly due to her unconscious jealousy of the boy.

A mother said of her daughter, "She is excellent in everything. Her former teacher says that there are none better. She has better manners than the others." This child did excel in nearly all of her school subjects but could not gracefully accept defeat and blamed others when she failed. Such a child is likely to lead a lonely life and soon or late to be sadly disillusioned. The parents are setting impossible standards for her and fostering attitudes which the world in general does not tolerate.

Carroll,[1] in his section on attitudes of the immediate family toward superior children, says that if there is too wide a gap in mental ability between parents and children, there is no community of interest between them.

The conclusion is that the fostering of undesirable attitudes is quite unconscious. Both home and school often fail to recognize the fact that children of superior intellect analyze to a greater extent, may carry their attitudes to far greater lengths, and are able to generalize much more than is supposed. As the school makes more thorough study of attitudes and arrives at a clearer understanding of the problem, an extensive field for parent education and for more mutual understanding will become apparent.

The following endeavor was made to interpret to parents of a class of gifted children, the efforts of the school to foster some desirable attitudes, and to discover the attitudes of parents toward those efforts.

A new type of report card for all children in the city of Cleveland was under consideration. In keeping with the growing trend of placing emphasis upon factors other than school achievement, the primary stress was to be placed upon citizenship. It was the general feeling that parents were vitally concerned with this aspect of child training and would therefore welcome the change in emphasis.

A group of fairly representative parents called together by one teacher expressed the following opinions:

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[1] Carroll, Herbert: *op. cit.*, p. 92.

Report cards are necessary as a spur to the child and as a contact between parents—particularly fathers—and school.

Scholastic achievement is most important and is the task of the school, while the citizenship phase is a home responsibility. Several admitted that they paid no attention to the citizenship side of the card.

School is synonymous with discipline.

Industry, to some minds, meant to be good and sit still. It is one citizenship phase which should be retained on the card.

Some would retain effort.

Parents left with the feeling that the tasks of home and school are quite clearly defined.

Later the teacher made a definite effort to change the attitude of the parents toward education for good citizenship.

One phase of citizenship was chosen each month for discussion by the class, and what constituted good classroom behavior under that particular head was decided upon. Charts were kept of what children did in specific instances.

At the end of the month each child received a sheet with the items listed upon which the class had been working. The child's actions were evaluated by the teacher and child together in such terms as "usually," "seldom," "often." Space was left for comments by parents.

The results proved that parents really were interested, in spite of their contrary statements, and attitudes toward many phases of child training were stated or implied.

Some of the replies follow:

"We know when she's wrong so we just punish without question." (Taking responsibility for action.)

"Likes to step in water; must always be punished." (Health habits.)

"Is continually talking and asking questions regardless of *how busy* one is." (Conduct.)

"Does not even hear instructions." (Promptness.)

"I usually take care of things myself." (Care of materials and equipment.)

The parent who "punishes without question" believes his own judgement to be infallible. His child may acquire one of several attitudes. He may see no extenuating circumstances in the actions of others and so become narrow and intolerant. He may decide that since he is to be punished, justly or unjustly, depending on his parent's

mood, he may as well do as he pleases. Again, he may become a timid, meek child with no ability to decide for himself

SAMPLE CITIZENSHIP RATING SHEET
RELIABILITY

Reliability has been discussed and defined by the class during April. How nearly your child approaches at school the standards set up is indicated below. How does he meet them at home?

	At School	*At Home*
I. RESPECTS PUBLIC AND PRIVATE PROPERTY		
A. At school:		
1. Uses books and other school materials carefully and economically.		
2. Uses his own materials—does not borrow.		
B. On the way to and from school:		
1. Stays off lawns, away from shrubbery, windows, parked cars.		
II. RESPECTS PEOPLE WITH WHOM HE COMES IN CONTACT		
A. Appreciates service rendered by such people as the librarian; policemar., custodian.		
B. Is courteous to them.		
III. IS TRUSTWORTHY		
A. Tells the truth.		
B. Takes responsibility for his actions even though consequences may be unpleasant.		
1. Does not blame others.		
C. Does the correct thing without constant supervision.		
D. Keeps promises.		

Something in the statement that the child "must always be punished" for stepping in water, implies that punishment is frequent and taken as a matter of course with neither side accomplishing much.

The third and fourth statements may denote impatience and nagging and may account for indifferent attitudes in school.

If a mother "usually takes care of things herself" the school can hardly expect the child to feel much responsibility for his personal possessions or for his group.

Antagonism between parents and children might be inferred from many of the replies.

The data, while not scientific, furnished much upon which to work with that particular group and either to some extent changed the attitudes of parents or at least proved that their attitudes were not those which their blanket statements seemed to imply.

ATTITUDES OF EDUCATORS

Another group whose attitudes have great effect upon superior children is the educational group, including both those who work directly with such children and those who view the various procedures without participating in them.

Most teachers who do this type of work are growing more conscious of the importance of attitudes in the maximum utilization of mental ability. It is being particularly stressed in Cleveland at present. Conscious turning of attention by the teacher to his own attitudes and the way in which they were acquired should enable him to understand some of the problems of children under his care. He must realize that he cannot impose his own attitudes without question upon his pupils. They are bringing their own acquired attitudes into conflict or agreement with his. Only his skill in controlling influential factors will produce change. Teachers as well as children must change attitudes when necessary.

The results of an attempt to measure the relatively liberal or conservative attitudes of teachers are given in the First Yearbook of the John Dewey Society.[1] The wide variation in replies seems significant. Apparently the more liberal the teacher the more influence he will have in the sphere of attitudes.

Many educators favor special education although not engaged in it, but in the case of a large number, a place for it must be definitely established. Adverse criticism seems to be based upon lack of understanding of its aims. Although the aim was never to make superior children achieve in the academic field and in no other, the subordination of other aims to that particular one, in the publicity afforded special classes, tended to give such an impression. And, in truth, that aim has until recently been given a major position. Effort is now being made to bring some of the more intangible aspects of such education up to the high standards set for academic achievement, but the original attitude is difficult to change.

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[1] First Yearbook of the John Dewey Society, William H. Kilpatrick (Editor), *The Teacher and Society*, Chapter VII.

Some criticisms which educators of gifted children must constantly meet from other educators are:

Such education is undemocratic.

The children do not need special equipment, more books, maps, more attractive rooms than other children. They already have far more than an average in native equipment.

Children of high IQ accomplish no more in the long run, get no higher grades, are as difficult as others to discipline, if not more so, and are conceited.

There is license, not freedom, in the class.

Teachers of superior children believe themselves to be superior and so tend to remain aloof from other teachers.

And so on, *ad infinitum*—

We like to believe that democracy implies equality for all in the sense that each individual may develop to his greatest capacity. Educators today do not deny the presence of varying capacities. Might not the failure to use greater capacity be considered undemocratic?

As to having more material in the classrooms, often the organization, with a wide span of ages, makes this a necessity. Also, many teachers of regular classes could secure more material if they felt the need keenly enough.

Children in special classes sometimes do not receive particularly high grades because more is expected of them.

Adults are too likely to impute to children the attitudes which they themselves would have in like situations. Adults singled out for special attention are very apt to feel some conceit. Educators may forget that selected children do not know all of the factors involved. They may not feel so much conceit.

The traditional right to dictate subject-matter has belonged to educators. Superior children gain more of their education from outside sources than do average children.

When superior children were the exceptions in heterogeneous groups, the individual who questioned or offered opinions might be considered queer or a smart-aleck, but was overwhelmed in numbers by the average and so caused little comment. A whole class of such individuals produces a cumulative effect and gives rise to unfavorable comment concerning the argumentativeness of its members. This questioning attitude may be considered license instead of freedom.

Teachers working in the field of special education for the gifted may have tended to become over-enthusiastic and to give the impression of having discovered the final solution for educating superior people. They do not usually feel superiority themselves. However,

it would no doubt prove profitable to search within themselves for sources of some disturbing attitudes toward them.

We are in an era of endeavor to give equality to all in the literal sense. It is a sort of leveling process. Since the average population is by far the largest, the trend is toward bringing everyone to the average. Every individual likes to feel that he could reach the level of any one else, given equal opportunity, but mental ability is beyond such acquisition and gives rise to envy.

> The bright child will, from infancy on, find this feeling (envy) in the attitude of others toward him. To vitiate its effectiveness, he must possess and make use of more charm and patience and understanding than will ever be required of his less gifted fellows. Again and again envy will cause individuals to point out and to emphasize his faults. Envy will color not only the attitude of casual acquaintances but also that of teachers, his playmates, his brothers and sisters, and even his own parents. Envy has helped to create, and will help to perpetuate, a false picture of him.[1]

Apparently, many adults, parents and educators as well, need education in attitudes toward the gifted.

ATTITUDES OF THE CHILDREN

What are some of the attitudes with which children are inculcated, advertently or inadvertently?

Children become very adept at giving the answers which they find acceptable to adults. There is wide discrepancy between knowledge and performance. Although his actions are to the contrary, almost every child knows what constitutes correct behavior on the playground, knows he should tell the truth, and would no doubt say that everyone should go to church although he privately thinks his parents get along very nicely without going.

Even if two sides of a question are presented and then his attitude tested, his response can be based only on the strongest appeal unless he has experienced some part of it or had it brought down to something which he has in common.

It would seem that the measurement of children's attitudes must be somewhat subjective, based upon observation, the tedious task of recording data, and the analysis of findings.

A few examples of attitudes found among children will serve to illustrate how much more can be learned about children's attitudes from analysis than from questioning.

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[1] Carroll, Herbert A.: *op. cit.*, pp. 58–59.

A superior fifth-grade boy made almost no effort to achieve in school. It was discovered that his father, of whom he was very fond, had never gone beyond the sixth grade, hated school, and refused to make the effort to rise in his chosen occupation because it would necessitate some further study. The son followed the father's pattern and probably will not finish high school although he possesses a college mind.

A child of seven, no doubt quoting an adult, remarked, "Russia is a big country and has lots of people but they are all dumb." Pointing out the beauty of some piece of Russian music or literature would help to counter-balance that attitude. Merely denying the child's statement would have little effect.

One non-conformist in the classroom wrote that he would rather be in school than in an enemy country where bombs were falling. He expressed his attitude toward school more truly then he knew. He evidently considered war and school on about the same plane. The attitude toward war he had picked up from adults but he had tied it up to something which he understood.

A class which experienced some phases of our democratic system of government through its own self-government plan in the classroom came to have a different understanding of the statement, "Democracy means freedom." They concluded that it is not always fun to be the one in authority because people do not always agree with the leader and even the President of the United States sometimes finds his position very trying.

Perhaps this experience did not so greatly affect these children. One can never be sure of attitudes. However, in problems such as these, experiencing attitudes rather than teaching attitudes might prove profitable.

High intelligence should result in ability to assemble data pertinent to all sides of a question and to view it objectively in order that valid decisions can be made. Gifted children will in all probability be called upon to make many decisions for themselves and possibly for others. Therefore, the teacher should lead children to see both sides of a problem and to foster unbiased attitudes.

Another factor seeming to affect the feeling of personal responsibility in gifted children is the fact that adults are joining organizations whose responsibility it is to settle current social problems.

Individuals join the union feeling assured of obtaining maximum benefit from their occupations. Church takes care of the religious

side of life. School takes care of education. All of these institutions are valuable, but people must not give over all responsibility for thinking and living to them. Each individual is still responsible for his own actions. The attitude of, "I am bright. It is up to you to teach me. You put forth the effort," is occasionally found in classes for the gifted. This seems almost a juvenile reflection of adult attitude.

Superior children should be led to seek that which they have in common with all people. Their intelligence differs only in amount and its only value lies in its effective use. They must acquire the understanding that those of lesser intelligence, by performing some of the more lowly but necessary tasks, free them to perform at a higher level.

Bentley[1] makes the point that there should be different expectation with regard to the accomplishment of children who learn rapidly when they are compared with the slower learners, and that they must not take rewards as a matter of course. If there is no stress and strain in the achievement, an unfavorable attitude toward life may result.

Emphasis upon service rendered rather than upon personal importance and reward should be the ultimate goal of education for the gifted.

RECENTLY EXPRESSED ATTITUDES TOWARD THE PLACE OF THE GIFTED IN SOCIETY

Attitudes toward superior people are being expressed by workers in many fields. This is encouraging to those who are trying to establish the gifted in society to the best advantage for all. When industry, business and the professions begin to designate qualities and attitudes desirable for educators to foster in the gifted, there is beginning a fusion of purpose.

Educators would do well to study the statements made at the Conference on Education for the Gifted, held December 13 and 14, 1940, under the auspices of Teachers' College, Columbia University, in honor of the late Leta S. Hollingworth. Opinions of people in various fields were admirably stated although there may be some disagreement with them.

Although not directly stated, the need for correct attitudes is implied in the emphasis upon balance in the gifted individual in statements by Du Pont,[2] speaking of the gifted in industry and business.

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[1] Bentley, John Edward: *Superior Children*, pp. 23–24.

[2] DuPont, Lammot: "The Place of the Gifted in Industry and Business," *Teachers College Record*, (February, 1941), pp. 382–385.

Labor presented the view that giftedness asserts itself in life achievement rather than in academic performance; that leadership often rises from the ranks; that considering the gifted as the elite destined to lead the masses is undemocratic. The necessity for coöperative endeavor is expressed.[1]

It might be added, however, that the coöperative endeavor must be carefully scrutinized to be sure that it is not a mass movement, motivated by the emotional appeal of the leader. Every coöperative endeavor has a coördinator who should be scrupulous in his aims. Leadership often rises from the ranks, but if it is worth while, the quality is usually possessed by one having innate capacity. Society cannot wait to view life in retrospect. The present is important. Ability must be utilized at the moment if there is to be life achievement.

Education's rôle in the field of developing leaders stressed the need for critical thinking. Bruner[2] stated that education should join forces with industry, labor, the professions, and all other American groups and should be so worth while that dictators will have no appeal for people or deflect them from the pursuance of democratic ideals.

The picture of the gifted presented by Robert Thorndike[3] is the ability to work with ideas. There should also be work in the field of personality and more follow-up work.

Pintner[4] urged the better use of all types of intelligence, not only the abstract.

Edward Thorndike[5] made the following statement:

> We want them to acquire decent manners and morals, indeed somewhat better manners and morals than we expect of the general run of children, but probably we do not want to wreck superior intellects by trying too hard to engraft on them such personal qualities as pertinacity in conflict, coöperativeness, sociability and charm.

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[1] Miller, Jr., Spencer: "The Place of the Gifted in Modern Life from the Viewpoint of Labor," *The Teachers' College Record*, (February, 1941), pp. 386–396.

[2] Bruner, Herbert B.: "Education's Rôle in Developing Leadership," *Teachers College Record*, (February, 1941), pp. 397–401.

[3] Thorndike, Robert L.: "Problems in Identification, Description and Development of the Gifted," *Teachers College Record*, (February, 1941), pp. 402–406.

[4] Pintner, Rudolph: "Superior Ability," *Teachers College Record*, (February, 1941), pp. 407–419.

[5] Thorndike, Edward L.: "Gifted Children in Small Cities," *Teachers College Record*, (February, 1941), pp. 420–427.

CONCLUSION

When the schools develop the wisdom to collect and meditate upon the attitudes—both expressed and implied—from all sources, when they are able to analyze, evaluate and view them objectively and without prejudice, then will they better understand how to foster desirable attitudes in gifted children. For children are not originally equipped with attitudes but rather acquire them as a result of learning situations.[1]

What is the best use to be made of superior mentality? If a child possessing such intelligence has acquired attitudes of critical thinking, of respect for service and achievement in both himself and others, of understanding and tolerance, and of responsibility toward himself and society, he will in all probability make use of his superior intellect both in school and in the wider sphere of his environment.

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[1] Turney, A. H.: "Some Psychological Aspects of Attitudes," *Educational Administration and Supervision*, (February, 1935), p. 124.

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EDUCATIONAL HIERARCHIES AND SCHOLASTIC SURVIVAL*

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Hierarchies of "scholastic ability" exist among different colleges and professional schools within a university. Students in medical schools usually obtain higher mean scores on scholastic aptitude tests than students in schools of pharmacy, for example. These hierarchies have been suggested by previous investigators. Williamson[3] has proposed a method for deriving differential norms based upon measures of scholastic aptitude at college entrance for students who eventuate as seniors in the various colleges within a university. Schneidler and Berdie,[1] using groups of student "survivors" graduating from various curricula and colleges, found differential educational ability patterns on the basis of measures of scholastic aptitude and educational achievement at the time of entrance to the University. Stuit and Donnelly,[2] using comparable methods, found similar differences among groups at another institution.

These discovered differences in ability at the time of entrance for various college groups are due to a number of factors. Admissions policies determine to a great extent the type of student within a college. These policies develop in part as a result of the abilities, skills, and other qualifications which have been found necessary for educational and professional success. Recommendations and requirements made by professional organizations for purposes of raising standards or limiting the occupational supply are also effective in determining admission policies. Sometimes inertia results in static policies. Vocational stereotypes held by students, parents and teachers also operate in the production of these curricular hierarchies. The general recognition, for example, that high achievement is important for success in medical training keeps a number of low ability students from attempting this training. Similarly, the general belief that ability in mathematics is a prerequisite for success in engineering helps make this group more homogeneous.

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Differences in colleges and classes such as are studied here should have value to counselors in the clinical advising of students regarding educational placement and vocational aptitudes. Investigations of these differences in educational ability patterns should be conducted for the local situation in which they are to be used in counseling. As mentioned above, the authors[1] have presented one study of differential educational ability profiles. In terms of a logical development, such a study might have followed the one here presented as the ability patterns are a further refinement of the educational hierarchies dealt with here.

The purpose of this study has been to determine the differences among colleges and classes at the University of Minnesota in terms of three measures of scholastic aptitude and achievement at the time of entrance to the University.

The results of this investigation divide themselves into two areas—one dealing with the differences in abilities at entrance to the University of students registered in different colleges of the University, and the other dealing with abilities at entrance to the University of students in different years or classes within the same college.

METHOD

Scores on three measures of scholastic aptitude and achievement are available for each freshman entering the University of Minnesota: The American Council on Education Psychological Examination, the Coöperative English Test, and rank in high-school graduating class. The names of students in residence at the University are included in an alphabetical directory published by the University and are identified by college and class. The procedure involved making lists from the directory for the academic year 1939–1940 of students according to class and sex for each college studied.

The entrance test data obtained at the beginning of the student's freshman year were then procured. Data were not available for all students. Students transferring from other schools are not required to take entrance tests. Different forms of the test were given in different years and it was necessary to equate the scores through the use of tables established by the Coöperative Test Service.* All

* These tables were obtained by giving several forms of the same test to the same group of students and determining raw scores on the different forms corresponding to the same percentile score. The justification for this method depends

scores on the American Council on Education were equated to scores on the 1937 form. All scores on the Coöperative English Test were equated to scores on the 1938 form O. M. A few of the scores were on forms of the tests not included in the equating tables, thus making it impossible to use such cases. No equating was necessary with the high-school ranks.

Table I presents by class, college, and sex the number of students who were listed in the directory and the number of cases included in the distributions of test scores. For example, there were twenty-two hundred five students in residence listed as sophomores in the College of Science Literature and the Arts. High-school ranks were available for eighteen hundred seventy-eight or eighty-five per cent; American Council Examination scores were available for nineteen hundred eighty or ninety per cent; and Coöperative English Test scores for eighteen hundred thirty-three or eighty-three per cent. In the College of Science Literature and the Arts, three hundred seventy-eight seniors were listed as being in residence during the year 1939–1940. High-school ranks were available for two hundred eighty-four or seventy-five per cent; American Council Examination scores for three hundred seven or eighty-one per cent; and Coöperative English Test scores for two hundred eleven or fifty-six per cent.

The proportion of cases for whom there are usable data tends to decrease with an increase in the length of time a group has been in school. No test data are available for advanced standing students from out-of-state schools and this is partially responsible for the decreasing amount of available data. Thus, for one hundred three seniors in the School of Medicine who have been in College for at least six years, high-school ranks were available for fifty-four, American Council Examination scores for sixty, and Coöperative English Test scores for too few to form a distribution. In very few groups, however, were there usable scores for less than fifty per cent of the total group and usually this percentage was considerably higher. Therefore, the assumption made in interpreting these data is that the results presented in Table I give a fairly accurate picture for the time of college entrance of the total group of "survivors" registered in 1939–1940 in the various classes and colleges of the University.

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upon a high correlation between the tests involved. The correlations between different forms of the American Council on Education Psychological Examination and the Coöperative English Tests are all very high.

TABLE I.—MEAN AND STANDARD DEVIATION OF SCORES ON THE COLLEGE ENTRANCE TESTS AND HIGH-SCHOOL PERCENTILE FOR STUDENTS IN THE UNIVERSITY IN 1939–1940, ACCORDING TO COLLEGE, CLASS AND SEX

College	Class	Sex	No. in address book*	High-school Percentile			American Council Examination			Coöperative English Test		
				N.	Mean	S.D.	N.	Mean	S.D.	N.	Mean	S.D.
Science, Literature and Arts	Freshmen	Men	....	760	68.82	22.38	777	85.79	23.08	775	177.69	41.67
		Women	....	665	78.70	19.06	697	86.12	23.27	703	199.92	38.12
		Total	....	1425	73.43	21.47	1474	85.94	23.17	1478	188.26	41.53
	Sophomore	Men	1311	1098	68.24	24.07	1158	91.62	27.32	1052	180.44	47.30
		Women	894	780	81.22	18.84	822	90.35	27.66	781	203.04	40.41
		Total	2205	1878	73.63	22.96	1980	91.09	27.47	1833	190.07	45.87
	Junior	Men	201	148	74.99	24.12	159	105.25	28.10	124	181.33	53.41
		Women	194	164	85.21	16.72	168	104.76	24.27	147	216.07	41.78
		Total	395	312	80.36	21.19	327	105.00	26.21	271	200.18	50.52
	Senior	Men	183	149	71.22	22.91	158	96.58	26.52	98	211.07	37.61
		Women	195	135	81.94	20.39	149	94.93	29.87	113	223.34	38.15
		Total	378	284	76.32	22.40	307	95.78	28.20	211	217.64	38.39
Institute of Technology	Freshmen	Men	....	566	72.63	20.51	508	87.28	24.11	618	168.74	45.37
	Sophomore	Men	636	529	70.66	22.70	487	92.13	24.75	381	183.06	42.18
	Junior	Men	492	370	72.00	22.30	347	96.61	27.82	268	182.52	41.09
	Senior	Men	535	376	73.62	22.12	310	93.84	28.72	255	189.56	38.02
Medicine	Freshmen†	Men	88	49	78.50	21.29	49	97.04	25.15	43	194.13	38.99
		Women	10	7	96.36	2.48	8	103.75	14.52	7	221.79	52.40
		Total	98	56	80.73	20.79	57	99.39	26.02	50	198.00	42.24
	Sophomore†	Men	92	63	78.58	20.03	52	104.04	25.74	36	217.92	32.69
	Junior†	Men	96	56	80.64	15.92	56	95.71	24.41	14	207.86	21.67
	Senior†	Men	98	54	80.07	18.65	60	96.67	28.53			
Law	Freshmen†	Men	128	110	75.55	20.85	100	101.80	28.14	58	201.62	39.88
	Sophomore†	Men	86	74	76.14	21.14	63	103.10	26.90	46	203.81	37.12
	Junior†	Men	67	38	78.76	19.63	24	100.42	27.69	23	206.41	37.33
	Senior†	Men	40	28	82.07	15.58	27	96.11	27.13			

TABLE I.—*Continued*

College	Class	Sex	No. in address book*	High-school Percentile			American Council Examination			Coöperative English Test		
				N.	Mean	S.D.	N.	Mean	S.D.	N.	Mean	S.D.
Dentistry	Sophomore†	Men	59	33	60.47	26.20	32	78.13	23.51	17	160.15	40.26
	Senior†	Men	78	44	62.59	25.43	42	73.81	26.92	12	166.24	34.89
Medical Technology	Junior	Women	45	32	90.06	12.08	35	103.00	28.00	27	213.61	39.50
	Senior	Women	41	29	91.60	10.54	24	104.17	21.97	24	223.13	28.00
University College	Senior	Men	18	12	81.83	13.44	12	100.83	27.83			
Agriculture, Forestry and Home Economics.	Freshmen	Men	....	176	55.57	25.79	175	66.09	22.92	177	137.42	42.21
		Women	....	165	74.02	22.14	162	71.79	23.03	166	167.89	41.48
		Total	....	341	.....	.....	337	.....	.....	343		
	Sophomore	Men	284	234	57.73	26.97	243	73.31	23.81	144	154.48	47.52
		Women	274	237	71.88	20.48	261	78.87	22.71	199	180.94	39.91
		Total	558	471	64.85	24.95	504	76.19	23.41	343	169.83	45.20
	Junior	Men	187	142	61.35	23.51	158	79.62	23.83	92	158.64	41.15
		Women	101	79	79.20	19.87	86	90.12	22.03	55	205.23	36.19
		Total	288	221	67.73	23.86	244	83.32	23.75	147	176.07	45.37
	Senior	Men	160	105	62.83	25.64	119	78.87	26.98	69	174.24	43.46
		Women	91	73	73.57	21.40	68	85.00	23.45	56	200.63	39.39
		Total	251	178	67.24	24.57	187	81.10	25.92	125	186.06	43.70
Education	Freshmen	Men	....	88	49.47	25.97	89	62.30	22.72	88	140.63	45.61
		Women	....	58	67.55	22.50	61	63.85	19.34	63	165.83	39.71
		Total	....	146	56.65	26.19	150	62.93	21.43	151	151.14	45.00
	Sophomore	Men	93	74	92.55	26.50	79	68.67	22.85	59	141.99	44.53
		Women	87	71	70.54	24.30	77	75.26	21.50	71	181.37	40.33
		Total	180	145	61.36	26.99	156	71.92	22.44	130	163.50	46.61
	Junior	Men	127	91	59.98	28.70	92	82.50	26.11	61	173.73	51.77
		Women	216	166	78.26	21.52	163	90.89	25.01	137	206.55	41.15
		Total	343	257	71.79	25.83	255	87.86	25.73	198	196.44	47.19
	Senior	Men	137	96	58.60	25.47	86	79.42	26.62	53	174.20	42.89
		Women	273	190	79.00	22.29	189	89.87	25.27	95	203.29	32.38
		Total	410	286	72.15	25.31	275	86.60	26.15	148	192.87	39.07

TABLE I.—*Continued*

College	Class	Sex	No. in address book*	High-school Percentile			American Council Examination			Coöperative English Test		
				N.	Mean	S.D.	N.	Mean	S.D.	N.	Mean	S.D.
Pharmacy	Freshmen	Men	41	37	59.72	27.00	35	75.00	20.98	35	156.21	42.78
	Sophomore	Men	34	27	60.72	24.32	28	85.00	24.50	25	164.70	46.69
	Junior	Men	34	29	61.43	22.38	29	83.28	28.90	18	158.33	47.03
	Senior	Men	34	23	60.67	25.10	24	80.00	15.55	10	183.00	9.49
Nursing	Sophomore	Women	83	60	80.00	13.52	63	80.56	23.62	53	184.39	35.49
Business	Junior	Men	280	231	72.29	22.02	236	88.94	25.45	188	185.58	35.63
		Women	71	61	88.50	15.28	59	95.34	26.74	56	214.82	32.71
		Total	351	292	75.67	21.81	295	90.22	25.84	244	192.30	37.08
	Senior	Men	189	138	73.10	19.84	147	86.36	21.65	106	186.79	38.24
		Women	45	42	90.52	10.41	41	99.88	24.90	42	223.95	30.38
		Total	234	180	77.17	19.53	188	89.31	23.09	148	197.33	42.06

* Data for freshmen were obtained from lists prepared by the colleges and not from the address book.

† "Freshmen" in the Colleges of Medicine, Dentistry and Law are first year students in these professional-schools, with two or more years of previous college work.

RESULTS

College Differences.—The means, standard deviations and frequencies on the three entrance measures for the various groups studied are presented in Table I.

Data for the professional schools of Medicine, Dentistry and Law, which require at least two years of Arts college work previous to entrance, are not exactly comparable to the data for other colleges. In the tables the "freshmen" or first-year students in Medicine, Law and Dentistry have had a period of college training equivalent to that of juniors or seniors in the College of Science, Literature and the Arts. In interpreting the results it is necessary to remember that in the cases of the three schools with the arts college prerequisite, the class represents the year of residence in the professional school. The data were obtained for all groups at the time of entrance to the University and not at the time of entrance to the professional school.

Table I shows the mean scores on the American Council on Education Psychological Examination taken as freshmen for students who were registered in the various colleges and classes of the University during the academic year, 1939–1940.

The differences in average college aptitude at entrance for students in different colleges are marked. For entering freshmen students, for example, the range of mean scores for the American Council on Education Psychological Examination is from 63 for freshmen males in Education to 87 for freshmen males in the Institute of Technology. The range in average college aptitude is large even for seniors in different colleges although there is some tendency for the differences between average scores to be smaller for upperclassmen. On the whole there is a definite tendency for the college aptitude of the average student in the colleges of Education, Agriculture, Dentistry, and Pharmacy to be lower than that of the average student in Science, Literature and the Arts, Law, Medicine, the Institute of Technology, and the School of Business Administration.

The differences among colleges for both men and women in average high-school rank can be seen in Table I and the patterning is the same, with the following colleges ranking highest: Medicine and Medical Technology, Law, Business Administration, Science, Literature and the Arts, and the Institute of Technology. The women in general were better high-school students than the men: Women in Home

Economics and Education were as good students in high school as the men in some of the high ranking colleges.

The same trend is apparent for the mean scores on the Coöperative English Test for men and for women registered in the various colleges and classes; *i.e.*, for Pharmacy and Dentistry and men in the colleges of Education and Agriculture to rank low.

Hierarchies of colleges according to these same variables might differ from institution to institution due to many factors, including differences in admissions policies. The results from this study should be only suggestive to personnel workers and administrators in other situations. Such differences among colleges should be known by those responsible for distributing students to educational curricula appropriate to their needs and abilities.

The variables used here have different significance in different colleges within a university. Prediction of success in the various colleges depends upon different combinations of factors. The variables studied here predict grades efficiently in some colleges and apparently bear little relationship to grades in others. This results from unlike objectives of colleges and differential demands for these abilities. For these reasons it can not be said that one college requires more or less "ability" than another but only that "ability," as defined by these three variables, varies from college to college.

Class Differences.—Looking at the findings from the point of view of class rather than college differences, results are not as clear cut. This is in part due to the fact that this is not a longitudinal study but rather a cross section study of the entrance ratings of four classes in residence at the University at one time. The class differences, however, do raise interesting questions.

Table I shows a general tendency for sophomores to be superior to freshmen and juniors to be superior to sophomores in respect to entrance test data. This is in line with expectation that the "survivors" would be those who were originally highest on the basis of entrance test data. This generalization does not hold in all colleges or with all measures. One might expect to find more consistency if college aptitude were the only factor operating in college mortality. There is evidence here that this factor is operating to some extent, especially in the first two or three years.

The figures do not show any consistent trend towards superiority for seniors in all colleges. In many instances there is a drop or no increase in college entrance ability from juniors to seniors. This is

evident in respect to several colleges for all three types of entrance data. Particularly with the American Council Examination, the average scores increase in the earlier years but are not superior in the last year or two.

There may be several possible explanations for these findings. First, the seniors may have been actually a poorer group on the average than the juniors when they entered the University. Statistics for the total groups of these two classes as freshmen were studied, however, and did not reveal any comparable differences on the entrance data.

Another possible explanation is that some of the superior students transfer after the junior year to other colleges or universities. Thus, it may be possible to account for some of the lower average scores for senior students in the College of Science, Literature and the Arts by the fact that many good students transfer to the School of Medicine and to the College of Law. As these trends are present for the women, however, and as relatively few women transfer to these professional schools, this explanation can not bear too much weight.

Another possible explanation for these general tendencies for the scores to increase in the first few years but not to show expected increases in the last years is that different factors or combinations of factors may be operating in the academic mortality of students in the later years than in the earlier ones. It is plausible that academic aptitude at entrance to college as indicated by these three variables is the major factor operating in student mortality between the first, second, and third years. By that time the academic stamina has been severely tested and beyond that period academic survival is not so much a matter of amount of general ability for college as it is a matter of other factors, such as enough funds to carry on.

These results do not indicate that the academic factors investigated here consistently produce increasingly superior classes. They do indicate that these factors are most effective during the first years. Although average abilities of college classes tend to be related to the length of time those classes have been in school, the selective factors producing this do not appear to be very important after the beginning of the junior year. These data suggest that withdrawals in the junior and senior year and voluntary and involuntary departures from the University are probably not expressions of lack of general scholastic aptitude but, perhaps, of deficiencies in specific abilities and financial and other problems. The results of this investigation were deter-

mined for a limited period of time at a single institution; therefore, generalizations must be made with care.

The first two years in many college curricula consist of general courses aimed at giving the student a background in English, the natural sciences, the social sciences, foreign languages, and mathematics. These courses are not highly specialized and usually the student with academic interests and with the requisite amount of general ability can do satisfactory work. After the second year, however, the work becomes more specialized for technical and professional training. Success at this level of training may depend more upon factors of specific abilities, interests, and informational backgrounds in special fields than upon greater general academic ability. In counseling students it is, therefore, desirable to have indications of differential aptitudes, such as educational ability profiles. It is not enough to make a diagnosis of academic success on the basis of measures of scholastic aptitude at college entrance. Counseling should be extended over a long period of time and should be based upon a knowledge of other factors which are operating beyond the first few years to differentiate survivors from non-survivors in the various colleges and curricula.

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A SURVEY OF CLINICAL SERVICES FOR POOR READERS

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A striking growth of interest in the clinical treatment of poor readers has been evident in psycho-educational and social-work circles during the past quarter century. Several valuable reports have been published concerning general practices followed in psycho-educational, psychiatric, and child guidance clinics.[1] In view of the continued interest in remedial reading, the writers conducted a questionnaire survey of recognized psychological and psychiatric clinics, to obtain specific information about the clinical services available for the diagnosis and treatment of reading disabilities. The inquiry was planned to secure descriptions of current diagnostic and therapeutic practices in clinics dealing with poor readers. In order to make the survey inclusive, questionnaires were sent to clinics associated with various types of institutions: Universities, teachers colleges, public schools, juvenile courts, reformatories and penitentiaries, and child guidance and mental hygiene centers. The information received from the clinics offering reading services forms the basis for this report. The writers hope it will prove useful to psychologists, teachers, school administrators, and social workers by providing them with factual information about clinical organization and operation. A study of techniques employed in diagnosing and treating reading disabilities as reported by the coöperating clinics is contained in another article, "The Clinical Diagnosis and Treatment of Reading Disabilities.[2]"

THE QUESTIONNAIRE RESPONDENTS AND THEIR AFFILIATIONS

A preliminary list of clinics for the survey was compiled from the following sources:

[1] An excellent bibliography of books and articles describing clinical practices is contained in the monograph, "Clinical Organization for Child Guidance within the Schools," by Elise H. Martens. *Bulletin* 1939, No. 15. Washington, D. C.: Government Printing Office, 1939.

[2] This article will appear in a subsequent issue of this journal.

Martens, Elise H., "Clinical Organization for Child Guidance within the Schools." *Bulletin*, 1939, No. 15. Washington, D. C.: U. S. Government Printing Office, 1939.

Newland, T. Ernest, "List of Approved State Psychological Clinics," Department of Public Instruction, Commonwealth of Pennsylvania, Harrisburg, Pa.

"Report of Committee of Clinical Section of American Psychological Association: The Definition of Clinical Psychology and Standards of Training for Clinical Psychologists; Guide to Psychological Clinics in the United States." *Psychological Clinic*, 23, Nos. 1 and 2, 1935.

Taylor, E. A., "A Report of Available Courses, Clinics, and Laboratory Facilities for the Training of Teachers of Reading." Educational Aids Department, American Optical Company, Southbridge, Mass., 1940.

Clinics mentioned in these sources but known to be rendering only specialized services not falling within the scope of this study were omitted from the survey. The mailing list included, however, a considerable number of clinics affiliated with hospitals, psychiatric institutes, and other centers where there was slight possibility that intensive study of poor readers was being done. Several clinics not included in the sources indicated above but known to be doing work in reading were added. The list to which questionnaires and letters were sent contained one hundred eighty names.

These one hundred eighty clinics were located in thirty-two states, practically all in the Northeast, North Central, and Northwest sections of the country.[1] Replies were received from one hundred twenty-five clinics. About one-third of these reported that they devoted little or no time to reading problems and, therefore, had too few or too fragmentary data to be worth submitting. Some clinics indicated that service to poor readers was but incidental to their other work, and was given little attention beyond preliminary diagnosis and referral to "appropriate" (usually school) agencies. Other clinics, offering reading services, had no staff time available for making a report. Of the fifty-eight clinics which endeavored to comply with the request for rather comprehensive information, seventeen gave partial reports in letters, published materials, or other documents.

Rather complete replies to the inquiry were received from forty-one clinics, although no clinic answered every item in the questionnaire. Information from these centers, located in twenty-four states, con-

[1] It is interesting to note that one-third of the states in 1940 did not appear to have any organized clinical psychological service for poor readers.

tributed most of the data for the statistical tabulations in this study. The seventeen partial reports did not lend themselves usually to tabular treatment; they were useful, however, in supplying evidence to support or to qualify the trends disclosed by the more complete questionnaire reports.

Forty-six per cent of the clinics were affiliated with higher educational institutions (universities, colleges, etc.), twenty-two per cent were public school clinics, twenty per cent were community agencies, and twelve per cent were independent clinics. These centers gave service in 1938–1939 to over ten thousand cases of poor reading, a slightly larger number than that for the preceding year. Special "reading clinics" were found only in affiliation with universities and colleges, although all the other (public school, community, and independent or private) clinics included in this study reported some, and usually a large, proportion of their cases as involving reading disability.

The data above have an important bearing upon the reliability of the survey, for they are an index to the adequacy of the clinic sample upon which this report is based. The proportion of "complete" replies may appear to be small. However, because of the rather eclectic nature of the clinics to which questionnaires were sent, it was anticipated that numerous clinics would have no data relevant to this study. It is likely that many of the non-respondents belonged in this category. Various obstacles prevented others from coöperating. The questionnaire respondents included, however, most of the better-known reading clinics in the country. Their locations parallel quite closely the geographic dispersion of clinics in the complete mailing list. An impressive amount of service to children and adults who read poorly is represented in the work of these agencies. In the light of these various considerations, the writers believe that their study covers a fairly representative sample of the psychological clinics devoting a substantial amount of their time and emphasis to reading problems.

TRAINING AND EXPERIENCE OF STAFF MEMBERS

Clinical personnel consisted generally of well-trained and experienced workers. The extensive academic training of the clinicians was reflected in the predominance of staff members with advanced degrees. A total of forty-one per cent of all clinical workers held Doctor's degrees (see Table I). Thirty-seven per cent of the clinicians reported the Master's as the highest degree; twenty-two per cent possessed only the Bachelor's degree. Many of the latter—graduate students, as a

rule, engaged in learning clinical routine—were performing clerical functions. The baccaleureate degree thus appeared indispensable to even minor staff-membership status. The more important clinical duties in the area of diagnosis and therapy were entrusted to persons holding at least the Master's degree and possessing a minimum of several years' experience.

Directors of clinics were especially well-trained, and almost invariably held advanced degrees. Of the fifty clinic directors for whom this information was available, nineteen (or thirty-eight per cent) held the Ph.D. or Ed.D. degrees and were psychologists. Seventeen (or thirty-four per cent) possessed the M.D. degree; about half of this group were psychiatrists. Most of the eleven persons with Master's degrees (twenty-two per cent) may be classified as psychologists; several were psychiatric social workers. The remaining small group of three directors with only Bachelor's degrees, were persons with supervisory experience in education.

Staff members reported a substantial amount of psychological or educational experience. Seventy per cent of the clinicians had engaged for seven or more years in their present work or in closely related endeavor.

TABLE I.—TRAINING AND EXPERIENCE OF STAFF MEMBERS

Highest degree	Per cent	Years of experience	Per cent
Doctor's:		none	1
Ph.D.	21	1– 3	15
M.D.	19	4– 6	14
Ed.D.	1	7–10	14
		11–15	23
	41	16–20	19
		21–25	7
Master's	37	26–30	3
Bachelor's	22	over 30	4
	100		100

SIZE OF CLINICAL STAFF

Staff size varied considerably, according to the scope of the clinic's work, the institutional affiliation, and the size of the case load. The number of staff members most commonly indicated was two to five,

with over half the clinics reporting staffs of this size. A marked tendency toward larger staffs was evident in big cities where the case load was the heaviest; and in one metropolitan area, branch clinics or units, with from four to seven staff members each, were maintained throughout the city. Five members comprised the average staff; this figure, however, was skewed upward considerably by clinics in big cities, where staffs of thirteen to seventeen people were reported. Some clinics with numerically small staffs had at their disposal the services of coöperating personnel in allied agencies which greatly enlarged their service and sphere of influence. In clinics maintained by teacher-training institutions, the services of student-teachers were frequently utilized. Assistance from apprentice workers and affiliated organizations often ameliorated the heavy case load, in terms of regular personnel, found in many clinics.

SIZE AND SEX RATIO OF CASE LOAD

Several clinics, operated by the public school systems in some of our very large cities, reported case loads of one thousand to three thousand annually. For all other types of clinics the annual average number of cases seen was seventy-five; the range was from two to two hundred sixty-five. The large city clinics did not break down their data to show the ratio of boys to girls referred as poor readers. The other clinics reported that boys comprised seventy-eight per cent of all referrals. This preponderance of boys over girls among poor readers has been noted by practically all students of reading.

TIME DEVOTED TO CLINICAL WORK

The time spent on clinical work by staff members was widely variant, depending upon the peculiar function and organization of each clinic. A majority (fifty-eight per cent) of workers, it is interesting to note, devoted full time (usually thirty to forty or more hours a week) to their clinical duties. About ten per cent of the personnel spent half-time (fifteen to twenty hours a week) in the clinic; nine per cent gave from eight to twelve hours a week; and thirteen per cent devoted a small but variable number of hours weekly to this work. Another group, about ten per cent, were "on call when needed."[1]

[1] In numerous reports it was necessary to translate statements such as "full-time," "quarter-time," and "two days per week" into numerical terms. The units chosen after examination of all reports were a six-hour clinic day and a

Clinics operated by metropolitan school systems and child guidance centers located in large cities gave full-time employment usually to psychiatrists and pediatricians. In smaller clinics consisting only of psychologists and social workers, and somewhat less frequently of psychologist, psychiatrist, and social worker, the latter tended to be the only full-time worker; the psychologist was available about two days a week, and the psychiatrist only several hours a week.

Universities and colleges frequently operated "one-man" clinics, with the director, usually a professor of psychology or education, engaging directly as well as supervising students in diagnostic and case study procedures. Although clinics devoted exclusively to the study and treatment of poor reading (and the training of clinic workers) were found only in higher educational institutions (as previously stated), directors of these clinics, and their assistants, almost invariably gave only a portion of their time to clinic activities, the remainder going to teaching, research, college administration, and other duties.

TIME SCHEDULES FOR CLINIC OPERATIONS

Length of operation of clinics varied from Summer months only to operation the year round. Seventy-eight per cent of the clinics operated from thirty-six to fifty-two weeks per year. Thus, even many of the small clinics functioned for a period of time corresponding roughly to the length of the school year. The large clinics invariably were open during the greater part of the year; they operated usually on a "full-time" basis weekly, and their personnel, as a rule, devoted their entire time to clinical duties. Part-time workers were found most frequently in the small clinics.

The amount of time clinics were open weekly varied from three to fifty-four hours. Thirty-three per cent of the clinics operated forty to forty-four hours a week, and twenty-two per cent operated thirty to thirty-nine hours a week. Thus, over half of the clinics operated on a "full-time" basis. The remainder of the clinics were open only on certain days or portions of days.

FEES FOR EXAMINATIONS

By far the great majority of centers (seventy-six per cent), including the large public school clinics, made no charge for their services.

thirty-hour clinic week. However, these figures represent central tendencies; they do not indicate many individual variations found in length of work periods. Hence the resulting estimates are only approximately correct.

Fifteen per cent of the clinics followed a graduated scale of fees, often dependent upon the subject's ability to pay. Fixed fees in the remaining clinics ranged from fifty cents to thirty dollars. It is evident from these data that clinical services were not restricted to those who could afford to pay for them.

TYPICAL PATTERNS IN CLINICAL ORGANIZATION

It is difficult to establish any representative pattern of clinical organization partly because of variations found in size of staffs. In small clinics, moreover, one person often combined the functions of many specialists in the larger clinics. Further obstacles arise from variations in the official titles of staff members doing similar work and from differences in the amount and kind of clinical service rendered.

The foregoing qualifications would seriously impair the representativeness of any single pattern of clinic organization that might be selected or synthesized from the reports. However, several actual illustrations which recurred a number of times with unimportant variations, and which appeared to represent the most popular types of clinical organization, are presented below.

Examination of Table II and of other related data indicates that in clinics employing the services of two or more persons a line-and-staff organization is followed. The principal officer was almost always known as the director.[1] This official was responsible for the general conduct of the clinic's affairs; he usually exercised control over procedure in handling cases, choice of clinical methods, and formulation of other policies. In addition he frequently took an active part in the diagnostic and remedial work of the clinic, and he represented the clinic in its relationships with allied agencies, the schools, and the public.

The director in some clinics, as Table II shows, did virtually all the work. In others, he was assisted by a small staff, consisting usually of another psychological clinician or pediatrician, one or two social workers, and graduate assistants who were used for routine test administrations and interviews. In large clinics the responsibilities of the various staff members were relatively well defined; their specialized functions are indicated by the titles of their positions and need no further explanation. Quite frequently the clinic staff included an

[1] In large municipal child guidance or mental hygiene clinics the head of staff was usually a psychiatrist; this position was occupied in clinics associated with large public school systems by psychologists and psychiatrists in about equal number; college and university clinics were generally directed by psychologists.

TABLE II.—REPRESENTATIVE CLINIC ORGANIZATIONS

Type of clinic	Positions in clinic or titles	Degrees held by personnel	Years of psychological and educational experience	Amount of time devoted to clinic practice
Psychological clinic of a large public school system.	Director	Ph.D.	25 years	Full time
	(11) Psychologists	(11) M.S. or Ph.D.	4–18 years	Full time (11)
	Clinical assistants			Full time
	Medical and social service from various coöperating agencies			
Child guidance center in fairly large city.	Director and psychiatrist	M.D.	7 years	Full time
	(5) Clinical psychologists	(5) A.M. or Ph.D.	4–10 years	Full time (5)
	Intake secretary	A.M.	3 years	Full time
	Psychological interne	A.M.	3 years	Full time
	Psychiatric social worker	A.M.	8 years	Full time
Mental hygiene clinic supported by Community Fund.	Director	Ph.D.	8 years	Full time
	Social worker	B.S.		Full time
	Social worker	A.B.		Full time
Reading clinic in a teachers college.....	Director, etc.	Ph.D.	11 years	5 hours a month
Psychological clinic operated by juvenile court of populous county.	Psychiatrist and medical director	M.D.	30 years	Full time
	Assistant psychiatrist	M.D.	16 years	Full time
	Physician	M.D.	34 years	Full time
	Psychological examiner	A.B.	10 years	Full time
	Psychological examiner	M.A.	2 years	Full time
A large behavior-problem clinic supported by Community Fund.	Medical director	M.D.	20 years	Full time
	Psychologist	Ph.D.	10 years	Full time
	Chief social service worker	M.S.S.	20 years	Full time
	Psychiatric social worker	M.S.S.	15 years	Full time
	Psychiatric social worker	M.S.S.	16 years	Full time
	Graduate student social worker	B.S.		Half time
	Graduate student social worker	B.S.		Half time
University reading clinic.....	Director	Ph.D.	6 years	Quarter time
	Graduate assistant	M.S.	4 years	Half time
	Student assistants	B.A. or M.A.	Beginners	Assigned to a few cases under supervision
Educational clinic in a university.	Director	Ed.D.	20 years	15 hours weekly
	Associate director	A.M.	20 years	25 hours weekly
	Psychological consultant	Ph.D.	15 years	5–10 hours weekly
	(4) Graduate assistants	(4) B.S.	0–20 years	10–15 hours weekly (4)
	Medical consultant	M.D.	20 years	On call

assistant director, a psychologist, psychiatrist, psychiatric social worker, and a secretary. In addition, other clinics mentioned one and sometimes more of the following specialized workers: Psychological examiners, psychologists in charge of reading, remedial teachers, consultants (of various kinds), nurses, intake secretaries, testing supervisors, telebinocular operators, audiometer operators, pediatricians, and ophthalmologists. Occasional clinics reported dentists or physicians on their regular staffs; as a rule, however, dental and medical service was provided by coöperating agencies.

DISTRIBUTION OF CASES BY EDUCATIONAL PLACEMENT

Information relating to the grade placement of cases is summarized in Table III. Practically all clinics (ninety-six per cent) accepted elementary-school pupils. These children made up seventy-eight and seven-tenth per cent of all clinic cases; and in two-thirds of the clinics they comprised from ninety to one hundred per cent of all cases examined. Poor readers among college students were accepted as cases in about half of the centers and provided eighteen and seven-tenth per cent of the clinic population.

High-school students also were examined in close to half of the

TABLE III.—EDUCATIONAL PLACEMENT OF READING CASES

Number of clinics reporting[1]	Grade level	Distribution of cases by grade level, per cent	
		Range	Average
23	Primary Grades	0–100	35.8
23	Intermediate Grades	0– 80	32.1
13	Upper Elementary Grades	0– 40	10.8
24	Total Elementary Grades	0–100	78.7
11	High School	½– 10	2.6
12	College	½–100	18.7
25	Total at all levels		100.0

[1] None of the figures in this column are cumulative.

clinics, but this group did not contribute a proportionate number of cases. Indeed, secondary-school pupils represented a negligible minority (two and six-tenth per cent) of the total distribution; in no clinic did

they account for more than ten per cent of the referrals. Because of the relatively unselected character of the American high-school population as compared with the college population there is reason to believe that the proportion of poor readers among the former is much greater. Moreover, the total high-school enrollment is several times that in the colleges. In view of these facts and the foregoing figures, it is clear that poor readers in high school are rarely referred to clinics.

On the other hand, the preponderance of reading cases in the primary grades (over one-third of all clinic referrals) suggests a commendable interest in diagnosing and correcting reading difficulties as early as possible; it also reflects an unwholesome emphasis upon the importance of reading for, and the attainment of norms by, all children in their first three school years. We shall discuss this situation at greater length in a second article.

SOURCES AND ACCURACY OF REFERRALS

By far the most important source of referrals was the school, which was mentioned by nearly every clinic. Its importance is suggested also by the fact that in almost half of the clinics the school provided three-fourths or more of the cases (see Table IV). In five of the latter

TABLE IV.—SOURCES OF REFERRAL OF READING CASES

Number of clinics reporting[1]	Sources	Incidence of cases from each source, per cent	
		Range	Average
26	Schools	0–100	58.2
17	Social Agencies	0–100	17.7
16	Parents	0– 50	10.0
8	Self	0– 40	4.1
9	Others	0– 85	10.1
28			100.1

[1] None of the figures in this column are cumulative.

clinics, which were operated by large school systems, the school quite naturally supplied all cases.

Important, too, as referral sources were parents and social agencies; both were listed by nearly every clinic which did not obtain its clientele from a single source such as the school or a court. Mentioned several

times but contributing relatively few cases were the following sources: Self (usually college students), clinic staff members, physicians, college professors, deans, student advisers, and examiners. Noteworthy were the referrals made to one clinic by freshmen class officers.

Most clinics (eighty-six per cent) reported that few or none of the children referred as reading problems were free from any reading difficulty. The remaining fourteen per cent of the clinics reported erroneous referral of reading cases in from ten to thirty per cent of the cases. The general accuracy with which cases of reading disability were referred appears to be due to the fact that schools are the major source of referrals and that their concept of poor reading tends to coincide with that held by clinicians.

SUMMARY

From the data that have been presented, a number of generalizations about clinical service for poor readers may be drawn.

(1) A substantial amount of service is provided for poor readers in various kinds of psychological clinics.[1] Some ten thousand cases were studied in 1938–1939 by the fifty-eight clinics included in this survey. While the total number of poor readers is a large multiple of the number of individuals treated in clinics, many teachers of the latter group are given insights and techniques with which to prevent, alleviate, and correct numerous other cases of reading disability.

(2) Clinics report that they treat more reading disability cases from the primary grades than from any other school level. A small percentage of their cases come from the upper elementary grades; a negligible proportion from the high school. There is reason to doubt that the grade distribution of cases seen in clinics parallels the relative incidence and significance of reading difficulties in the various grades.

(3) The professional qualifications of clinical personnel appear to be excellent, if we use as criteria for this judgment their extensive academic training and psychological-educational experience. Gratifying, too, is the abundant evidence that workers from the professions of social work, medicine, optometry, ophthalmology, and others—as well as from psychology and education—are contributing their respective talents and collaborating effectively in many clinic centers in a concerted attempt at diagnosis and treatment of problems having manifold causes and multiple facets for therapeutic effort.

[1] The nature of this service will be appraised in a second article.

(4) It is hardly necessary to comment upon the wide-spread institutional and public acceptance of the psychological-psychiatric clinic. That clinics are becoming firmly established is suggested by the fact that practically all clinics not affiliated with universities and colleges employ at least one full-time worker. Moreover, most of the clinics studied operated at least throughout the school year. In this connection it may be noted also that somewhat more cases of poor reading were seen in 1938–1939 than in 1937–1938. Recognition of the aid offered by clinics to poor readers is reflected in the varied sources of referrals, which include parents, schools, social agencies, and others.

(5) The specialized reading clinics, found only in universities and colleges, treated no more than one-tenth of all reading cases seen by clinics. Nevertheless, the importance of the reading clinic is not to be minimized. It appears most significant as a center for research and for training of personnel. Techniques and procedures pioneered and tested by the reading clinic find their way rather quickly to the great service clinics in the public schools and community centers.

THE RELATION BETWEEN A PERSON'S INTELLIGENCE QUOTIENT AND HIS RATE OF PROGRESS IN SCHOOL

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It has long been known that IQ and school progress are correlated positively in a community where education is free and obligatory. The grade reached at a given age, or the age at which a given grade is reached, is a measure very easy to obtain, and, if the correlation is close enough, may often be useful for a rough estimate of IQ. It will be closer, the later the age up through the time of compulsory attendance, or the higher the grade that one uses. It will be closer, the more rigorously the school system promotes by ability and achievement, and the more fully it gives ability a chance to achieve. Other things being equal, it will be closer for the population of one school system than for a population drawn from many, because differences in promotional standards and customs will be greater among the principals and teachers in a group of cities than in a single city. The correlation between the IQ's by two reputable intelligence examinations of forty-five minutes each for pupils of age 10.0, or 11.0, or 12.0 is rarely much over .80. If a school progress record correlates .80 or higher with a standard intelligence test score for a population of equal age, it may be treated as itself an intelligence examination having merit equal to that of a standard intelligence test score, and may be combined with the latter to increase the precision of the rating of the person. It may even be substituted for the latter.

It is consequently worth while to learn more about the relation between grade reached at a given age and test score, or between the age at which a given grade is reached and test score. The former is the more important relation to measure, but our contribution concerns the latter.

Dr. Ella Woodyard gave the National Intelligence Examination (both Form *A* and Form *B*) to all pupils in grade VI in the public schools of thirty cities of from twenty thousand to thirty thousand population in 1930, during the school year of '39 and '40. Over eleven

thousand pupils were measured. All the test blanks were scored by competent workers under her supervision. For each pupil in eight of the cities and for each pupil in a random sampling from three other cities we have computed a quotient which is not an IQ in the sense of $\frac{\text{mental age}}{\text{chronological age}}$, but will correlate almost perfectly with that, and is in some respects better. It is

$$\frac{\text{Score of individual } X \text{ in National } A + B}{\text{Median score made by persons of the age of } X}.$$

Our age score is not the age at which the individual first appeared in grade VI, but the age at which he was found in grade VI. All the tests in any one city were contemporaneous within two or three days. Of five persons all age 12.0 on our records, one may have entered grade VI that Fall, another a year ago that Fall, another two years ago, whereas another may perhaps have been moved out of grade V into grade VI the week before. For our present purposes our records are adequate. The correlation for them will presumably be a little higher than that for records of the age at entrance to grade VI, and lower than that for records of the age at entrance to grade VII.

The correlations for the pupils in eleven northern cities and for the white pupils in six southern cities are shown in Table I. To avoid certain technical difficulties caused by the nature of our quotients, all these correlations are computed by Sheppard's formula. These correlations are the same as they would be if $\frac{\text{mental age}}{\text{chronological age}}$ had been used for each pupil.

The facts of Table I demonstrate that, at the present time, rate of progress in school, measured by the age of reaching grade VI or VII, or by the grade reached at age eleven or twelve, is a very useful measure. If measured for a later grade or older age, it should be still more useful. The differences in standards for entrance to grade VI between cities are not so great as to make any substantial reduction in the value of measures of pupils from cities remote in space, and very unlike in wealth, or welfare, or both.

If promotions are made more dependent on ability and achievement, the value of the rate of school progress as a measure should be even greater. If they are made less so, the value will be reduced. A convenient objective check on this in any school system will be the variability in age of pupils in the same school grade, since departures

TABLE I.—THE CORRELATIONS BETWEEN IQ AND AGE AT THE TIME OF THE TEST IN GRADE VI OF SEVENTEEN CITIES

	Date of test	*n*	*r*
Northern cities, Group *A*			
City *S*	10- 9-39	229	.82
L	10-11-39	349	.53
K	10-20-39	364	.80
B	10-23-39	272	.68
O	10-25-39	271	.82
I	10-30-39	202	.76
Northern cities, Group *B*			
City *L*	12-18-39	259	.88
H	1- 9-40	289	.65
C	1-15-40	149	.94
M	1-22-40	336	.79
W	1-26-40	368	.69
Southern cities, white pupils only			
City *A1*	3- 1-40	376	.88
P	3- 5-40	261	.88
D	3-12-40	161	.83
A2	4- 3-40	117	.87
V	4- 9-40	126	.82
J	4-11-40	129	.81
Median correlation of northern cities	.....	.....	.79
Median correlation of southern cities	.....	.....	.85
Correlation for the combined plot for all northern pupils, Group *A*	.....	1,687	.70
Group *B*	.....	1,401	.74
Correlation for the combined plot for the southern cities (white pupils)	.....	1,170	.86
Correlation for the combined plot for the northern cities Group *B* and the southern cities, after the ages of the southern pupils are all moved back two months	.....	2,571	.78
Correlation for the combined plot for all seventeen cities after the ages of the southern pupils are moved back two months and the ages of northern pupils in Group *A* are moved forward two months	.....	4,258	.74

from promotion for ability in a school system will tend to be toward promotion by age.

It would be possible to make tables of IQ's corresponding to each month-age of entrance to, or presence in, or graduation from, each grade, for grades IV to XII, and possibly for earlier grades. The facts needed are available in school systems where intelligence examinations have been given widely. With such conversion tables at hand the work of obtaining IQ's from classroom records of age would be trifling. As we have shown, their value would be approximately that of an independent forty-five-minute standard intelligence test.

STUDENTS ATTEMPT SELF-EVALUATION OF WORK IN EDUCATIONAL PSYCHOLOGY

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For some years the writer has been disturbed about the functional value (or lack of value) to the student of the traditional course in Educational Psychology where the primary purpose of the teacher has been to wheedle or cajole the majority of students into learning (memorizing) a lot of facts gleaned from one or more books labeled, Educational Psychology. Under this traditional setup, the primary purpose of the learner seems to have been to accumulate enough information to get the desired *A*, *B*, *C*, or *D*.

From a functional standpoint there seem to be several paramount weaknesses in the approaches commonly used in Educational Psychology which result in the questionable value of such courses. Some of these weaknesses are: The student has little or no share in considering and deciding: (1) What his intrinsic purposes and goals in the course should be, (2) what problems it is important for him as an individual to study for his own good, (3) how to locate materials and other sources of information likely to be most helpful in working on problems of importance to him, (4) how to use most effectively materials and other sources so that suggested solutions to his problems will become apparent, (5) how to keep self-organized records of ideas likely to be of use to him later on, and (6) how to analyze the weaknesses in his past and present work so that he may make more rapid progress in future work. This paper is concerned with the last problem and suggests one approach which the writer believes has proved of value to students.

DISTINGUISHING FEATURES OF COURSES

During the first semester of the school year of 1941–1942 the writer taught two classes made up of fifty-three junior and senior students in the University of Alabama. To give a background for the "self-evaluation of work" pictured in this paper, it seems desirable first to mention very briefly some characteristics of the classes which distinguish them from more conventional classes. The following are some of these features:

(1) Each student helped to set up his major purposes and goals in the course.

(2) Each student was working on problems which he selected with the help of the instructor as ones which he is now facing or is likely to face in the future.

(3) At any particular time after the first few weeks there were approximately forty different problems being worked on by the fifty-three students. This reflects the attempt to take care of individual differences in felt needs and purposes.

(4) Any "assignments" which were made were generally made after consultation with all of those concerned.

(5) The records or progress report of the work of each student were periodically examined for criticism and suggestions by the instructor and other students.

(6) An attempt was made to encourage students to work primarily for more intrinsic values than that of simply getting a mark or credit for the course.

(7) Each student was encouraged continually to evaluate his own work in terms of the progress he was making toward goals of importance to him. Emphasis was placed on the idea that one of the major purposes of such evaluation was to redirect future activities so that the work might be made more profitable.

MAKING THE QUESTIONS FOR SELF-EXAMINATION

In the University where the classes were conducted it is the custom for the teacher to make out and give a test at the end of the first six weeks of work. Other tests are usually given before and afterward, but the "six weeks' tests" are considered rather important. At the end of about three weeks of work the instructor encouraged the students to begin thinking about four problems related to a test in the course. These were: (1) If the primary purpose of the test was to have each student, with the guidance of the instructor, check up upon what he has done during the first six weeks with a view toward becoming more efficient in future activities, upon what activities should he attempt to check himself? (2) In view of the attempt to take care of individual differences in needs and attitudes in the work, what questions would it be well to have all students consider? (3) Should the test be an "in class" or an "out of class" test? (4) What would be probable advantages and disadvantages of each of various kinds of test approaches which might be used?

About a week after the questions listed above were raised by students and instructor, each student was asked to list and bring to

class the points upon which he believed he should test himself. Then, using these points as a basis, the class, with the help and guidance of the instructor, formulated the test which is given below. After the class work some questions were restated and regrouped by the instructor.

SELF-EXAMINATION OF WORK

I. Questions relating to goals toward which to work and problems upon which to work:

(1) Am I improving in the ability to pick out problems of importance for me to study? Evidence?

(2) Are the results I am getting in my study something which are likely to be of value to me? If so, when? How?

(3) Have I been working on something that represents a real need to me? Evidence?

(4) Do I have specific goals and am I making progress toward them? Describe.

II. Work with others:

(5) Am I progressing in the matter of my contributions to class discussions? Evidence?

(6) Do I indirectly help myself by helping others? If so, indicate in what ways I have helped others.

(7) Have I been sufficiently willing to accept suggestions for improving my work? If so, give some specific instances.

III. Records and organization of work:

(8) Am I progressing in my ability to keep records that include the type of materials I am likely to need later on? Evidence?

(9) Am I improving in the ability to organize my work? Evidence?

IV. Initiative:

(10) Am I learning to plan my own work more effectively? Evidence?

(11) Am I improving in the ability to go ahead with my study without being told almost every step? Evidence?

V. Interest in work:

(12) Is my interest in the work growing? Evidence?

VI. Open-mindedness and objectivity:

(13) Am I improving in the ability to hold my mind open sufficiently on all controversial issues?

(14) Are the conclusions I have drawn based on evidence? If so, illustrate.

VII. Use of available resources:

(15) Am I learning how to use the library and other resources better in study?

(16) Am I learning how and where to get some materials which are not immediately available? If so, give examples of what has been learned.

(17) In my study am I placing too much dependence upon books and not enough on other resources available? If so, what resources should I probably use more?

VIII. General method:

(18) Am I giving sufficient consideration to the methods of study and teaching used in in-class and out-of-class work so that I might sometime try them myself? If so, show this by indicating (*a*) What outstanding characteristics of our methods are, (*b*) Possible weaknesses and possible strengths of the methods.

(19) In my work in other classes am I using some of the ideas with respect to study methods gained in this class? If so, illustrate.

(20) Give one or more suggestions for improving class work so that it will be more profitable to me.

IX. Evaluation:

(21) Am I learning how to check up on what I have done so that I may improve my future work? Evidence?

(22) Am I sufficiently conscious of my present weaknesses? If so, indicate what I think they are and indicate what steps I think I should take in trying to eliminate them. (Utilize this list of questions.)

(23) Add one additional question which I think would be appropriate in this self-examination.

(24) Contrast this method of examination with that with which I am more familiar by giving outstanding characteristics of each.

(25) (*a*) Give what I think are possible weaknesses of this method of self-examination. (*b*) Give what I think are the major values to be derived from a test of this sort.

After considerable discussion on the part of the class concerning how and when the test should be used, it was decided: (1) That each student should think through all questions and the answers thereto, (2) that each student should write out the answers to questions numbered 20, 23, 24, and 25 and such other questions as he felt reasonably well qualified to answer at this time, (3) that the significance and implications of all of these questions should be constantly kept in mind during the work of the remainder of the semester; and (4) that it would be more profitable to think through and answer the questions outside of class and take the class time for other work.

In order that the reader may get a picture of the reactions of students to this type of self-examination a summary of the answers to the (*a*) and (*b*) parts of question 25 is given below:

25(*a*) Give what you think are possible weaknesses of this method of self-examination.

"Student may not now be able to evaluate work well since this is the first examination of this type many of us have taken."

"Test does not emphasize material learned from text or outside reading."

"Questions may overlap too much."

"Student may not be sincere or conscientious in examining his own work."

"There may be a tendency on the part of some students to overestimate their abilities."

"There is no definite key for grading the test." "Students may not think this method of self-examination is fair because grades are not given by a certain standard set up by the teacher."

"Some students will not spend sufficient time carefully thinking out questions."

"Student may use other people's opinions without forming his own."

"The student may think that the professor may not like what he really thinks and maybe he had better answer the questions in a flowery manner." "Student may not express himself freely as to his weaknesses and difficulties and thus defeat the purpose of the test. If the student does this the instructor cannot help him very much with the problems he faces."

"We are not as familiar with our material now as we will be later on. If it were possible, I believe a personal interview to discuss these questions would be better than writing them."

"It seems to me that this examination, if it is one, tries to find out what you have done rather than what you know."

"Some students feel 'lost' when taking such an examination."

"Some motivation or incentive for study may be destroyed since there is no danger of surprise questions."

"The student with the ability to express himself adequately has an advantage over the student who has made considerable progress but is weak in self-expression."

25(*b*) Give what you think are the major values to be derived from a test of this kind.

"Helps the student see his work, investigate his weaknesses, and see the good points. Will help us to do better work in the future." "Teaches student self-evaluation."

"This test gives an opportunity for suggestions as to improving class work, tests, etc."

"As teachers we will be called on in the future to make out tests, and helping to make out this test will prove helpful later on."

"Will give us training in critical analysis, not only of our own work, but of others in the future."

"We can see how much progress we are making in the course."

"There is no danger of going to pieces because of emotional upset in this type of test."

"It takes care of individual differences better than the conventional test." "It serves as a test that is applicable to each individual and to his individual problem."

"This type of examination places the emphasis on learning and not on score."

"Instead of simply requiring facts, this test emphasizes thoughtful opinions based on facts."

"It is a practical examination and one from which the student derives valuable work."

"It gives you an idea of what is expected of you in class and while working on your problem."

"It is a good indication of whether you have done your work." "It aids the instructor in helping the student eliminate his difficulties."

"Teaches student how to think for himself and not to depend upon the teacher too much for suggestions."

"Because a student knows he will have a self-examination, he can plan his work so that it will be more profitable than just memorizing a lot of answers out of a book."

"Does away with the old atmosphere of—'I've got to learn this because it will be on the test.'"

"It is a learning examination rather than merely a testing examination."

"A plan for future work can be made right along with the test."

The writer has presented a method used in encouraging students to learn how to evaluate their own activities so that greater progress may be made in future work.

BOOK REVIEWS

J. W. M. Whiting. *Becoming a Kwoma.* New Haven, Conn.: Yale University Press, 1941, pp. 226.

Ranging over an area of some twenty square miles on the Sepic River in Northeast New Guinea is an obscure tribe of about three hundred seventy-five natives who call themselves Kwoma. Whiting lived for seven months with these people and wrote *Becoming a Kwoma* as a report of what and how the youth are taught as they grow up. The book includes chapters describing the periods of infancy, weaning, childhood, adolescence, and adulthood and emphasizes especially the transitional teaching and learning. The author's writing style is effective with the result that the reader receives clear-cut impressions of real people as they live together, rear their young, and carry on simple economic enterprises. Nothing he has read recently has so impressed the reviewer with the relativity of many of his own cultural habits.

Whiting was unusually candid in his description of the very real limitations to which his observations of native life were subject. As the reader goes along he develops the assurance that so honest a reporter would practice every precaution possible before formulating his generalizations. Because of the conditions under which he worked many precautions must have been necessary. For example, only at the very end of his visit could the author carry on an extended, even though halting, conversation in the native language. All other information came through the use of Pidgin English which had been learned by some of the youths. A second handicap to scientific inquiry was the attitude of the natives toward the white man. With considerable justification, this attitude was one of apprehension. On two recent occasions the Australian Colonial officials had visited white man's justice on the tribe by killing fifteen or twenty natives, burning their homes and destroying their gardens. When Whiting and his companion arrived in the hamlet which he was to study, he was accompanied by a government official who demanded that a new house be built at once for the ethnographers and scolded the natives continuously for various misdemeanors.

Indicative of still another limitation was the fact that women were practically unavailable as informants because of the strong taboos against revealing to a man the kind of cultural information that was

being sought. Hence the socialization process as reported is decidedly masculine in emphasis. The small number of cases on which many of the observations were based coupled with the limitations of Pidgin English as a medium for discussing a complex native culture made "the anthropological practice of establishing the reliability of data by checking with as many informants as possible," at times unconvincing. Added to all these difficulties was the fact that Whiting, despite his subsequent convictions about the importance of learning theory to the student of socialization, undertook no serious study of the subject until he had returned from his trip. For this reason, and as the author admits (page xviii), "crucial data were frequently not gathered." It would be unfair to compare the author's account of his trip to New Guinea with a report made by a brilliant Kwoma after seven months in an American crossroad community, but the two would have many of the same trials and tribulations.

The academic psychologist will be more interested in the second part of the book which deals with the learning principles which served the Kwomas as they inducted their youths into the customs of the tribe. This discussion of the way learning was brought about impressed the reviewer as being less penetrating than the preceding description of what had to be learned. Whiting had apparently been persuaded by Hull of the adequacy of a single learning theory and he consequently seemed to be trying to fit a preconceived theory to observational data rather than trying to infer important principles of learning from instances of observed behavior. The author explained all aspects of acculturation in terms of the: (1) Drive, (2) cue, (3) response, (4) reward, paradigm (*sic.* p. 173) which had been developed by Dollard and Miller in their *Social Learning and Imitation.* To the reviewer, this analysis, while serving many purposes admirably, does not in its subsequent elaboration give sufficient recognition to multiple response or to generalization or to the basic fact that learning means a change in behavior and hence implies some obstacle to smooth going consummatory activity. The learning theory elaborated in *Becoming a Kwoma* is derived rather directly from Thorndike and Pavlov (p. 173) and is subject to many of the limitations of other S-R hypotheses.

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ROLAND H. CHATTERTON. *Methods of Lesson Observing by Pre-service Student-teachers.* Contributions to Education, No. 834. New

York: Bureau of Publications, Teachers College, Columbia University, 1941, pp. 137.

"The purpose of this investigation was to determine some of the values of the observational techniques used by teachers-in-training when appraising lessons." Four groups of observers were equated on the basis of preliminary work. Then each group employed a different observational technique designated as (1) the "no record" group, (2) the "full running notes" group, (3) the "code" group, and (4) the "code plus teachers' objective" group. These were the most commonly employed techniques used in teacher-training institutions. Ten lessons were observed, each group using its assigned technique throughout.

Among the findings are the following: (1) The code groups combined were significantly better than the non-code groups. (2) Although the code *versus* the non-code comparisons revealed a significant difference in amount of pupil participation recorded, only chance variation occurred when a similar comparison was made of categories based on type of pupil activity. Furthermore, each of the groups employing a code technique was superior to each group not employing code when recording amount of pupil participation. (3) For activities not dependent on the coded items, no technique was superior to another.

This treatise, which evaluates certain techniques for observation of pupil activities in the classroom, should be of considerable value to those concerned with teacher-training. Furthermore, the check list (printed in full) furnishes a new type of observational guide sheet for student-teachers.

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CHARLES E. GERMANE AND EDITH G. GERMANE. *Personnel Work in High School.* New York: Silver Burdett Co., 1941, pp. 599.

D. WELTY LEFEVER, ARCHIE M. TURRELL, AND HENRY I. WEITZEL. *Principles and Techniques of Guidance.* New York: Ronald Press Co., 1941, pp. 522.

These books are written for the same readers, examine similar problems, and agree on basic principles. Both books are addressed to school administrators, teachers, counselors, and teachers and counselors in training. Both are concerned with guidance in the secondary

school. Both discuss basic problems: Need for, and viewpoints of, a guidance program, ways of learning about students, and methods within the school situation for providing facilities to meet student needs.

Personnel Work in High School consists of three parts: "The Acute Need for an Organized Personnel Program," "Tested Ways of Discovering the Aptitudes, Interests and Needs of Students," and "Effective Ways of Providing Student Guidance." The typography aids rapid reading—large type, ample space, pertinent headings. At the end of each chapter is a selected list of annotated references, "Materials for Enrichment." At the end of the book under the heading, "Useful Reference Material," are found a number of "Teacher-made, or 'Improvised,' Testing Materials." They include diagnostic reading-study tests: Reading interpretation, mathematics reading, vocabulary, and immediate recall; a study-habit inventory, an adjustment questionnaire, and a vocational interest inventory. These devices were developed by the authors in their investigation with the coöperation of the school personnel and are available to anyone who wishes to mimeograph them for use in a guidance program.

These improvised testing materials constitute the outstanding defect of the book, for they imply that test construction is an easy task that may be undertaken by any school too impecunious to purchase adequately standardized tests. All that the authors tell the reader about these home-made devices are that

> These measurements were improvised and roughly standardized by giving them to fourteen thousand students in forty-two high schools. (p. 72)
>
> The rankings of the students who were given these teacher-improvised tests were compared with their rankings upon several of the most reliable and widely used standardized tests. The correlations between these improvised and standardized measurements ranged all the way from 69 to 92. (p. 57)
>
> The validity and reliability of these tests are sufficient and satisfactory for their use and purpose. (p. 509)

Only in the case of the adjustment questionnaire are we given more details and they are not of the nature to inspire confidence. Apparently the authors subscribe to the slogan, "It is better to measure with unknown and inadequate devices than not to measure at all." This belief is out of place in psychology and education and particularly pernicious in a book on guidance.

Principles and Techniques of Guidance consists of four parts: "Points of View," "Personnel," "Plans," and "Procedures." The

book appears at first glance to be more formidable than *Personnel Work in High School* but reading is facilitated by bold headings. At the end of each chapter there are a brief "Summary," "Questions and Problems for the Student," and "Selected References." The Appendix reproduces three questionnaires: Questionnaire for Growth-Needs Study (of students), Questionnaire and Data for Counselor-Activities Study (how the counselor spends his time), and a Questionnaire and Chart for Admission to Technology Training. The Section on "Summary of Limitations to the Uses of Tests" (pp. 268–271) is particularly good. The book as a whole is well balanced, comprehensive, and scholarly.

The purposes in writing these books are dissimilar and many of the differences in style and emphasis spring from this fact. *Personnel Work in High School* "embodies the results of five years of experimentation and investigation in forty-two high schools." "It is an attempt to present in considerable detail the materials, methods, measurements, and outcomes of a five-year investigation, the purpose of which was to establish the basis for a personnel program in high school that could be initiated and conducted effectively, even under highly unfavorable conditions." On the other hand, *Principles and Techniques of Guidance* was written to develop "a broad understanding of guidance on the part of both teachers and counselors . . . " "Suggestions for the implementation of such a broad concept of guidance is the purpose of this volume."

As a result, *Personnel Work in High School* resembles a manual; *Principles and Techniques of Guidance* is a textbook. The former is easier to read, more practical, and more specific. Germane and Germane openly state their belief that "the teacher is in a key position to render personnel service to students." " . . . all teachers can and should be educated to use many of the techniques and procedures in personnel work which in some schools are the assumed prerogatives of the clinical psychologist or specially trained counselor." (Preface, vii.) Lefever, Turrell, and Weitzel examine both the specialized staff or service concept of guidance and the "education-as-guidance" concept and conclude that "This book will endeavor to stay with both points of view." They agree that "the teacher will continue to play the central rôle" in a guidance program, but they state emphatically that "The teacher's greatest contribution will be made as a part of his regular classroom activities, not in a special period set apart for guidance purposes."

There is a difference in emphasis on the rôle of individual counseling. Germane and Germane make it the core of a guidance program—"For there is no substitute for intelligent, individual counseling. It is the heart, the pulsating point in all guidance and personnel work." (p. 291) Lefever, Turrell, and Weitzel also agree on the importance of individual counseling but do not stress it so much—"Individual counseling supplements the group approach."

The similarities far exceed the differences; most of the differences arise mainly from variations in emphasis. Both books agree on two basic principles: (1) That the guidance point of view, or interest in the pupil as an individual, "must be made to permeate the entire school situation." (*Principles and Techniques of Guidance*, p. 59.) (2) That someone has to be placed in charge of the entire guidance program. Both books are a contribution to the literature in secondary-school guidance. In many ways each complements the other. This reviewer recommends *Personnel Work in High School* for school administrators and *Principles and Techniques of Guidance* for teachers and counselors in training.

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J. EDWARD TODD. *Social Norms and the Behavior of College Students.* New York: Teachers College, Columbia University, 1941, pp. 190.

Social Norms and the Behavior of College Students is a Teachers College contribution to education which concerns itself with some significant problems in present-day education. The general orientation of this study indicates a wider and more organized perspective than is usually manifested in dissertation studies.

The pattern of American culture, according to this investigator, is characterized by an emphasis on economic values, which is followed closely in importance by political values and, third, by theoretical values. Social, religious, and aesthetic values play minor rôles. Values as used by the author are based completely on Spranger's studies and Allport-Vernon Study of Values Scale, which is also based on Spranger. The data concerning the values of college students are based on three thousand one hundred sixty-seven questionnaires and one hundred thirty-seven case studies from the Study of the Transition from School to College. These materials contain information regarding the students after they left one hundred three secondary schools in New York, New Jersey, and Pennsylvania, and some additional

information after they had attended the freshman year in college. Analysis of variants and co-variants as well as correlation techniques are employed in the treatment of the data. All the statistical data, however, are presented in lump fashion in the appendix. A quotation from some approved source precedes each chapter.

The general conclusion concerning the values of American college students is that they are in line with patterns of American culture; namely, in the college the order of the Allport-Vernon Study of Values Test was economic, political, theoretical, social, religious, and aesthetic. In the high school the order was political, theoretical, economic, religious, social, and aesthetic.

According to the author, the educational implications of these conclusions are somewhat tragic. Arguing that some of our more serious problems, unemployment and war, are the fruits of value patterns which are not socially constructed, he comes to the conclusion that "a more ideal cultural pattern would prize religious values most highly; aesthetic and theoretical, second; political and social, next; and economic values, last." There is nothing in this study, however, to indicate that a social organization based on this set of values would necessarily be good. It does clearly show, however, that the author of this investigation has himself some predetermined attitudes of what values we ought to have. The only evidence he gives for the assertion that a society where religious values would be prized more highly would be better than where the emphasis is as in ours, is in his case studies that he presents.

In a chapter captioned "The Dynamic Character of Personal Values" the value profile and case history of the student who rated highest on each of the six values are presented. The college boy who rated highest in economic values is referred to as the Economic Student, the one who rated highest in religious values is called the Religious Student, and so on. On the basis of the six case studies the author draws certain conclusions concerning the adjustment significance of each value. The Political Student, for example, "sought recognition and prestige in his high-school activities. This desire for place and power was almost the cause of his failure in engineering school where thorough intellectual and technical work was prized." On the other hand, in the Religious Student "one sees a highly persistent pattern and an integrated life around his well-developed religious values." However, a more critical evaluation of the information given about the boy merely reveals that the interviewing and information obtained

about the boy was only casual and very superficial and that the boy who gets along with his family and accepts their norms has fewer conflicts with society in his growth. In this particular instance it is in the field of religion. One does not need statistical data to know that many ministers' sons do not come out that well.

Throughout the book one gets the notion that the author has a predetermined bias in favor of religion. He quotes Dr. Alexis Carrel's *Man, the Unknown* with great approval and also T. S. Elliot. In his case study material we find such expressions as approve religion on the basis of instinct, which sounds very amusing in a treatise from Columbia University. For example, on page 53 we have the Theoretical Student described as having a "native religious devotion and piety" and on page 52 we see him described as having an "innate appreciation of beauty." The halo effect of the interviewer seemed to be working overtime. Also in the book there is manifested a naive acceptance of Bernreuter's Personality Inventory as a valid and reliable measure of personality adjustments.

Our American culture probably does overvaluate economic and political values. Here and there one sees a growth of interest in art, which does not show up in this study. One can say of the study that the college students selected by the investigator do not represent an American sampling; they merely represent a New England and eastern sampling. Whether students from California or the Middle-west would have similar values is questionable. The problems attacked by the investigator are significant. For picking a problem that has significance for American culture the author deserves credit, but he seems to know the answers before he starts investigating and one gets the impression that the purpose of this study is not to discover but to reveal, emphasize, and express a few "oughts" about American life.

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Lowry S. Howard. *The Road Ahead: A College Orientation and Guidance Book.* Yonkers-on-Hudson, New York: World Book Company, 1941, pp. 402.

The author offers this book as a text for freshmen orientation courses. In the Editor's Introduction by Terman (who also participated in the editing) we learn that "A central purpose of the book is to cultivate in the student the will to self-analysis, a readiness to

assess objectively and unemotionally his abilities, his disabilities, his motivations, and his customary patterns of adjustment." The author states that he "has sought to give guidance and information to the beginner in college in a way that will serve him not only during his academic years but also in the years to follow."

Some of the topics included in the fifteen chapters are human needs, how we learn, effective reading, effective study, personality, sex interests and marriage, and modern trends in choosing a vocation. An annotated bibliography and suggestions for further reading follow each chapter.

The problem of organization becomes paramount in any text for a college orientation course because of the necessity for consideration of a diversity of topics. Howard has solved this problem successfully. He has presented a logically organized, systematic presentation of a variety of material. It is written in a very readable and easy style. The selected references are particularly good.

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CONSERVATION OF SCHOLARLY JOURNALS

The American Library Association created this last year the Committee on Aid to Libraries in War Areas, headed by John R. Russell, the Librarian of the University of Rochester. The Committee is faced with numerous serious problems and hopes that American scholars and scientists will be of considerable aid in the solution of one of these problems.

One of the most difficult tasks in library reconstruction after the first World War was that of completing foreign institutional sets of American scholarly, scientific, and technical periodicals. The attempt to avoid a duplication of that situation is now the concern of the Committee.

Many sets of journals will be broken by the financial inability of the institutions to renew subscriptions. As far as possible they will be completed from a stock of periodicals being purchased by the Committee. Many more will have been broken through mail difficulties and loss of shipments, while still other sets will have disappeared in the destruction of libraries. The size of the eventual demand is impossible to estimate, but requests received by the Committee already give evidence that it will be enormous.

With an imminent paper shortage attempts are being made to collect old periodicals for pulp. Fearing this possible reduction in the already limited supply of scholarly and scientific journals, the Committee hopes to enlist the coöperation of subscribers to this JOURNAL in preventing the sacrifice of this type of material to the pulp demand. It is scarcely necessary to mention the appreciation of foreign institutions and scholars for this activity.

Questions concerning the project or concerning the value of particular periodicals to the project should be directed to Wayne M. Hartwell, Executive Assistant to the Committee on Aid to Libraries in War Areas, Rush Rhees Library, University of Rochester, Rochester, New York.